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OM protein - protein search, using sw model

Run on: October 21, 2004, 06:36:06 : Search time 40 Seconds
(without alignments)
942.924 Million cell updates/sec

Title: US-10-628-395-2
Perfect score: 187
Sequence: 1 MDTFLWSSLFLPFGSQAER.....FINMHNPTEISILENGRVTNP 392
Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR79:*

1: pir1:*

2: pir2:*

3: pir3:*

4: pir4:*

Prod. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query	Match	Length	DB ID	Description
1	78.5	39.7	410	2	S70647	neuroserpin precursor
2	728	36.6	191	2	S49162	ZG-21p protein - r
3	650	32.7	390	2	I38201	sernamous cell carc
4	625	32.0	390	2	I38202	lepinin precursor -
5	589	29.6	376	1	A48681	plicental thrombin
6	586	29.5	388	1	DYCH	leukocyte elastase
7	577.5	29.1	379	2	A42421	plasminogen activa
8	577	29.0	400	2	JC4265	proteinase inhibitor
9	575	28.9	397	2	I48717	elastase inhibitor
10	573.5	28.9	379	2	S27383	plasminogen activa
11	570.5	28.7	402	1	A35032	proteinase inhibit
12	569	28.6	378	2	A57488	contrapsin - human
13	562	28.3	397	2	B27496	serpin - pig
14	561	28.2	378	2	S38962	gila-derived nexin
15	558	28.1	398	2	A37274	plasminogen activa
16	558	28.1	402	1	S06745	ovalbumin - Japan
17	555.5	28.0	402	1	A34761	antithrombin III P
18	553.5	27.9	418	2	JX0129	antithrombin III P
19	552	27.8	418	2	S23675	serine proteinase
20	548.5	27.6	397	2	I39184	antithrombin III -
21	547.5	27.6	391	2	JC7118	proteinase inhibit
22	547	27.5	386	1	OACH	plasminogen activa
23	544.5	27.4	383	2	S11433	ovalbumin - Japan
24	544.5	27.4	464	1	XHNU3	antithrombin III P
25	537	27.0	465	2	I59611	serine proteinase
26	535.5	27.0	418	1	S31507	antithrombin III -
27	535	26.9	431	1	JX0364	proteinase inhibit
28	533	26.8	374	2	A59273	plasminogen activa
29	530	26.7	402	1	ITHUP1	serine proteinase

ALIGNMENTS

RESULT 1	S70647	neuroserpin precursor - chicken
C;Species:	Gallus Gallus (chicken)	
C;Date:	14-Feb-1997 #sequence_revision 13-Mar-1997 #text_change 09-Jul-2004	
R;Accession:	S70647; S77695	
R;Osterwalder, T.; Contartese, J.; Stocekli, E.T.; Sondergger, P.		
EMBO J. 15, 2944-2953, 1996		
A;Title:	Neuroserpin, an axonally secreted serine protease inhibitor	
A;Reference:	S70647; PMID:867254;	
A;Cross-references:	UNIPROT:Q90935; EMBL:Z71930; PIDN:CAA96493_1; PMID:913	
A;Experimental source:	brain	
A;Accession:	S77695	
A;Molecule type:	protein	
A;Residues:	1-10 <OST1>	
C;Supfamily:	Serpin	
C;Keywords:	serine proteinase inhibitor	
F1-16/Domain:	signal sequence	#status predicted <SIG>
F1-17-10/Product:	neuroserpin #status experimental <NAT>	
Query Match	39.7%	Score 788.5; DB 2; Length 410;
Best Local Similarity	40.0%	Pred. No. 7.3e-45; Mismatches 158; Conservative 92; Gaps 3;
Matches	158;	
Qy	5 FLWSSLFLFQSOASCSAQNT-	FIFLSPGLQTIVLQEVQL 61
Db	3 FLGLSLVLPKSKAFTNFDPDIAILSVNVNYNQRAARDENIDFCPLSTAANGMIEL 62	
Qy	62 GAKGKACQQIROTQKQETSGEEFLVKSFCSAISEKKQEFPTNLANALYQEGFTYKE 121	
Db	63 GAHGTTLKEIRHSLGFDLSKNGEEFTFLKLDSDMATTESHYVLMANSLYVQNGHVSE 122	
Qy	182 AIFYKGWIKQKERRQEDTQLINATKNGSTVIPMKALLRTYQYSESSNN---YQVL 237	
Db	183 AIFYKGWIKSQRPENTRTSEFTKDETDEVQPMYQQGEFYGFSDGSNEAGGIYQVL 242	
Qy	122 QYLHGKNEKFQSAIKLUVDFQDAKACAMISTWERTDKKQDMGSGBEFPPLTVLYLN 181	
Db	123 KFLQLVKYKFXAEVENIDFSQSSAAVATHINKWENHTNMKDFVSSRDFSLTHLVLIN 182	
Qy	238 ELSYGKDEFSLIIILPAEGMDIEEVKLITAQQIKLKWLSMQUEEVEISLPRFKVEQKV 297	
Db	243 EIPYEGDIIISMIIVLSSQEVPVTLPLVKASLINEWANSTRKQKREVEYDFTEQEID 302	
Qy	298 FKVDIYSNITBIFGGCDLSGITDSSEVYTSQTKVFPIEDGESEAATSTGHIPVI 357	
Db	303 LKDVLGKGLGITVFSRSRADLTMSDRELYLAKFKAFLVEVNEGESEAASGMIAISR 362	
Qy	358 MLSAQSQFIANHPFLFMKHNPTEISLFMGRVTP 392	

MAVLYPQVITVDHPPFFLVRNRRTCTVLFGRVNHFP 397

A;Cross-references: GB:S66896, NID:g239551; PID:AAB20405.1; PID:g239552
 A;Accession: JTC967
 A;Molecule type: protein
 A;Residues: 11-21;21-27;240-256;303-325 <SUM2>
 C;Comment: This antigen probably acts as a protease inhibitor to modulate the host immune system.
 C;Genetics:
 A;Gene: GB:SCCA1; SCC
 A;Cross-references: GDB:625364; OMIM:600517
 A;Map position: 18q11.3-18q2.3
 A;Introns: 55/3; 74/3; 117/3; 204/3; 256/3
 C;Superfamily: Serpin
 C;Keyword: Cysteine protease inhibitor; Glycoprotein
 A;Description: A novel protein expressed exclusively in pancreas is proposed to be a serine protease inhibitor. It is a member of the EMBL Data Library, March 1994.
 A;Reference number: S49162
 A;Accession: S49162
 A;Status: preliminary
 A;Molecule type: mRNA
 A;Residues: 1-191 <CRO>
 C;Superfamily: Serpin
 A;Cross-references: UNIPROT:Q63547; EMBL:220585; NID:g510193; PID:95101
 C;Species: Rattus norvegicus (Norway rat)
 C;Date: 16-Feb-1995 #sequence_revision 12-May-1995 #text_change 09-Jul-2004
 C;Accession: S49162
 R;Cronshagen, U.; Chen, C.; Kern, H.F.
 R;Submitted to the EMBL Data Library, March 1994.
 A;Description: A novel protein expressed exclusively in pancreas is proposed to be a serine protease inhibitor. It is a member of the EMBL Data Library, March 1994.
 A;Reference number: S49162
 A;Accession: S49162
 A;Status: preliminary
 A;Molecule type: mRNA
 A;Residues: 1-191 <CRO>
 C;Superfamily: Serpin
 A;Cross-references: UNIPROT:Q63547; EMBL:220585; NID:g510193; PID:CAA83060.1; PID:95101
 C;Species: Homo sapiens (man)
 C;Date: 23-Feb-1996 #sequence_revision 23-Feb-1996 #text_change 09-Jul-2004
 C;Accession: I38201; I38200; GO1631; JT0966; JT0967
 R;Schneider, S.S.; Schick, C.; Fish, K.E.; Miller, B.; Pena, J.C.; Treter, S.D.; Hui, S.
 Proc. Natl. Acad. Sci. U.S.A. 92, 3147-3151, 1995
 A;Title: A serine proteinase inhibitor locus at 18q21.3 contains a tandem duplication of R;Silverman, G.A.
 A;Reference number: I38200; MUID:95241462; PMID:7724531
 A;Accession: I38201
 A;Status: nucleic acid sequence not shown
 A;Molecule type: DNA
 A;Residues: 1-390 <SCIN>
 A;Cross-references: UNIPROT:P29508; EMBL:U19558; GB:U19558; NID:g1172085
 A;Accession: I38200
 A;Status: nucleic acid sequence not shown
 A;Molecule type: DNA
 A;Residues: 1-117 <SCIN>
 A;Cross-references: EMBL:U19556; NID:g1276435; PID:g1052869
 R;Sumimoto, Y.; Kishi, F.; Sekiguchi, K.; Kato, H.
 B;Chem. Biophys. Res. Commun. 181, 51-58, 1991
 A;Title: Squamous cell carcinoma antigen is a new member of the serine protease inhibitor family.
 A;Reference number: JT0966; MUID:92068241;
 A;Accession: JT0966
 A;Molecule type: mRNA
 A;Residues: 1-350, 'G', 352-356, 'A', 358-390 <SUM1>
 A;Cross-references: EMBL:X89015; NID:g887464; PID:CAA61420.1; PID:g887465
 C;Genetics:
 Query Match 32.7% Score 650, DB 2; Length 390;
 Best Local Similarity 35.1%; Pred. No. 9.9e-36;
 Matches 138; Conservative 90; Mismatches 135; Indels 30; Gaps 6;
 Qy 23 AQKNTFAYDLYQEVSLSHRDNIFSPGLTIVLEMVOGAKRRAQQCQIRQLKQQTTS- 81
 Db 5 SEANTKFMFDLQQFRSKKENNFYSPSISITSALGMWLGARDNTAQIKVYHFDQVTE 64
 Qy 82 -----AGEEFLVLSFCSAISEKKQEFTFNLANALYLOGFTVKEOYLHGNK 128
 Db 65 NTTGKAATYHVDRGNTTHQFQLLTBNFKSTDAYELKANKFGEKTYFLQELYDAIK 124
 Db 129 EFFOSAKIILKLVDFODA-KACAEIMSTWVERKTGDGKIKMFSGEEFGPFLTRLVNNAIVTFKG 187
 Qy 125 KFYQPSVESTSFANAPEBFRKCNWSQTSNKRKNLPIEGNTGNTTLVIVNAIVTFKG 184
 Db 188 DWKQKFRKDQTLINFTKNGSTVKIPMKMALLRKYGYFESSSLNVQVLELSYKGDEF 247
 Db 185 QWEKCFNKEDTKEEKFWPNKNTYKSIOMROY-TSPHFASLEDVQAVKLETPYKGHDLS 242
 Qy 248 LILLPAGMDIEVEKLITAQQLKW--LSENQEEVEVISPRKFYEQRQDFKDVYSL 305
 Db 243 MIVLPLNEIDGLQKLEELTAKLMEWTSQNRETVRLDHLPRKVEESYPLKDTRTM 302
 Qy 306 NITEIFGGCDLGSITDSSEVVYSQVTOKVFFRINEDSSEAAATSTGTHIPVMSLAQS-- 363
 Db 303 GMVIDPFGDADLGMGTSRGLVLSGVNHLKAFVBTVECAAAAT---AVAVFGSSPT 357
 Qy 364 ----QFIANHPFLFIMKHNPTESTLWYGRVTNP 392
 Db 358 STNEBFHCNHPFLFIRONKNSILFGRFSSP 390
 RESULT 4
 I38302 Leupin precursor - human
 N;Alternate names: proteinase inhibitor 11 (PI11); squamous cell carcinoma antigen 2
 C;Species: Homo sapiens (man)
 C;Date: 23-Feb-1996 #sequence_revision 23-Feb-1996 #text_change 15-Sep-2003
 C;Accession: I38202; S66675; S65522
 R;Schneider, S.S.; Schick, C.; Fish, K.E.; Miller, B.; Pena, J.C.; Treter, S.D.; Hui, S.
 Proc. Natl. Acad. Sci. U.S.A. 92, 3117-3151, 1995
 A;Title: A serine protease inhibitor locus at 18q21.3 contains a tandem duplication of R;Silverman, G.A.
 A;Reference number: I38200; MUID:95241462; PMID:7724531
 A;Status: nucleic acid sequence not shown
 A;Molecule type: DNA
 A;Residues: 1-390 <SCIN>
 A;Cross-references: EMBL:U19576; GB:U19569; NID:g882466
 R;Barres, R.C.; Worrall, D.M.
 PEBS Lett. 313, 61-65, 1995
 A;Title: Identification of a novel human serpin gene; cloning sequencing and expression of R;Silverman, G.A.
 A;Reference number: S66675; MUID:96013887; PMID:7589435
 A;Accession: S66675
 A;Molecule type: mRNA
 A;Residues: 7-351, 'V', 353-384 <BAR>
 A;Cross-references: EMBL:X89015; NID:g887464; PID:CAA61420.1; PID:g887465
 C;Genetics:

A;Gene: GDB:SCCA2; PID: P111
 A;Cross-references: GB:636556; OMIM:600518
 A;MAP Position: 18q21.3-18q21.3
 A;Introns: 55/3; 74/3; 117/3; 157/1; 204/3; 256/3
 C;Family: Serpin; serine proteinase inhibitor
 C;Keywords: glycoprotein; serine proteinase inhibitor
 P;1-22/Domain: signal sequence #status predicted <SG>
 P;65;93;170;316/Binding site: carbohydrate (Asn) (covalent) #status predicted
 F;354/Inhibitory site: Leu (unidentified proteinase) #status predicted

Query Match 32.0%; Score 635; DB 2; Length 390;
 Best Local Similarity 35.0%; Pred. No. 9..7e-35; Mismatches 138; Indels 32; Gaps 7;

Matches 138; Conservative 90; Mismatches 134; Indels 32; Gaps 7;

Qy 23 AQRNTEFAYDLYQPSVLSRSHKDNTFISPGDITVLEMYLGAKGKAQQIQRQLKQQETS- 81
 Db 5 SEANTKFMDFQFRKSKENNIFYSPSITSALGNVILGAKDNTAQISKVLHFDQTYE 64

B2 -----AGEEFLVLKSFCSAISEKQEFPTMNLANALYLQGEGFTVEQYLDHGNK 128
 Db 65 NTEKAATYHVDRSGNVHQFKLLETFNKSTDAYELKANKLFGEKTYQFQEYLDAIK 124

Qy 129 EFGQSAIKLVDPEQDQA-KACAEIYSTWPRKTDGKIKDNFSGEFFGPTLVLVNAFYFGK 187
 Db 125 KFYOTSVESTDFAAPEBSRKCKNSWESNEKINQFPDGTTGNDTTLVLVNAFYFGK 184

Qy 188 DWKOKPKEFDTQLINFTKRGNSTTKIPMKKALLRTKYGYFSESSL--NYQVLELSYKGD 244
 Db 185 QWEKFKKENTKEEKFWPNKNTYKSVQMR-----QYNSFNFAILEDQYQKLEIPYRGK 239

Qy 245 EFLSLILPAAGMDIEEVKEKLITQQLKRN--LSEMQEEBEVTSLPKRVKEQKVDFKDVL 302
 Db 240 DLSMIVLPLNEIDGLQKLEEKLTAEKLMWTSQNMRCTCYDHLPLRTMEESYDLKDTL 299

Qy 303 YSLNTEIFSGCDLSGTTDSSEYYVSQTQKVFEIENDGESEATSGIHIPVIMSIA- 361
 Db 300 RTGMGNVNINFADLSGMWSHGLSVSKYHKAPVEVTEBGEVAAARAV--VVFELESS 356

Qy 362 ---QSQFIANHPPLTMKRPTESTILMGRVTNP 392
 Db 357 PSTNEFFCCNHPPLFIRQNTNSILXFGRSSP 390

RESULT 5
 A48681 Placental thrombin inhibitor - human
 N;Alternative names: cytoplasmic antiproteinase; intracellular serine proteinase inhibitor
 C;Species: Homo sapiens (man)
 C;Date: 07-Apr-1994 #sequence revision 07-Jul-1995 #text change 09-Jul-2004
 R;Coughlin, P.; Sun, J.; Cerrit, L.; Salem, H.H.; Bird, P.
 Proc. Natl. Acad. Sci., U.S.A. 90, 9417-9421, 1993
 P;Reference number: A48681; MUID:94022386; PMID:8415716
 A;Accession: A48681
 A;Molecule type: mRNA
 A;Residues 1-376 <SG>
 A;Cross-references: UNIPROT:P35237; GB:222658; PID:CAA80373.1; PID:5297412
 A;Experimental source: placenta
 A;Note: authors translated the codon CAA for residue 198 as GLY
 R;Morgenstern, K.A.; Sprecher, C.; Holt, L.; Posser, D.; Grant, F.J.; Ching, A.; Kisiel
 Biochemistry 33, 3433-3441, 1994
 A;Title: Complementary DNA cloning and kinetic characterization of a novel intracellular
 A;Reference number: A54352; MUID:9418384; PMID:8136380
 A;Accession: A54352
 A;Molecule type: mRNA
 A;Residues 1-14 'B'176-361 'S'363-376 <MOR>
 A;Cross-references: GB:S6972; PID:9546088
 A;Experimental source: placenta
 A;Note: sequence extracted from NCBI backbone (NCBIN:145231, NCBIPI:145232)
 R;Coughlin, P.B.; Tetzl, T.; Salem, H.H.
 J. Biol. Chem. 268, 9541-9547, 1993

RESULT 6
 dyChalvin-related Y protein - chicken
 C;Species: Gallus gallus (chicken)
 C;Accession: A01244
 R;Heilig, R.; Muraskowsky, R.; Kloepfer, C.; Mandel, J.L.
 Nucleic Acids Res. 10, 4363-4382, 1982
 A;Title: The ovalbumin gene family: complete sequence and structure of the Y gene.
 A;Reference number: A01244; MUID:83014329; PMID:7122240
 A;Accession: A01244
 A;Molecule type: DNA
 A;Residues: 1-388 <HE>
 A;Cross-references: UNIPROT:P01014; GB:V00439; PID:G212899; PID:AAA68882.1.
 C;Genetics:
 A;Introns: 56/3; 73/3; 116/3; 156/1; 203/3; 255/3
 C;Superfamily: Serpin
 C;Keywords: glycoprotein; phosphoprotein; serine proteinase inhibitor
 F;7/12/Disulfide bonds: #status predicted
 F;293/Banding site: carbohydrate (Asn) (covalent) #status predicted
 F;245/Banding site: phosphate (Ser) (covalent) #status predicted

Query Match 29.5%; Score 586; DB 1; Length 388;
 Best Local Similarity 32.5%; Pred. No. 1..7e-31;
 Matches 125; Conservative 95; Mismatches 143; Indels 22; Gaps 9;

RESULT 9

Db 235 STPERRYDILEPYHGGTLMSPFIAAPPYKDPVLSALTNILDAQLISSWKGNNMTRRLLL 294
 elastase inhibitor - human
 elastase inhibitor - human (man)

Qy 286 SLPREFKVEQKVDFFDVLYSINITEIF-SGGCDLGSITPSSEVVYVSOTKVYFFEBINEDGS 344
 C;Species: Homo sapiens (man)
 C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 09-Jul-2004

Db 295 VLPKESLESTVNLRGPLENIGMTMFRQADFSLSDDEALVSQLQKVIEVNEGT 354
 C;Accession: S21383 ; S65750
 R;Packard, B.Z.; Lee, S.S.; Remold-O'Donnell, E.; Komoriya, A.
 Biochim. Biophys. Acta 1269, 41-50, 1995

Qy 345 EAATSTGIIHPVIMSLAQSOFIANTHPFLIMKRPTESSLEMGRVTP 392
 A;Title: Sequence and molecular characterization of human monocyte/neutrophil elastase
 A;Reference number: S27383 ; MUID:9230296 ; PMID:1376927

Db 355 VASSSTAATIVSARM-APEEITMDRPFELVVRNPTGTVLFEMCQMEP 400
 A;Accession: S27383
 A;Status: Preliminary
 A;Molecule type: mRNA
 A;Residues: 1-319 <REM>

I48717
 proteinase inhibitor nexin I precursor - mouse
 C;Species: Mus musculus (house mouse)
 C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004

Qy 400 VASSSTAATIVSARM-APEEITMDRPFELVVRNPTGTVLFEMCQMEP 400
 A;Accession: I48717 ; S70772 ; S35731
 R;Vassalli, J.D.; Huarte, J.; Bosco, D.; Sappino, A.P.; Velardi, A.; Wohlwe
 MBO J 12, 1871-1878, 1993

A;Title: Protease-nexin I as an androgen-dependent secretory product of the murine semin
 A;Reference number: I48717 ; MUID:93259128 ; PMID:8491179

A;Status: preliminary; translated from GB/EMBL/DBJ
 A;Molecule type: mRNA
 A;Residues: 1-397 <RES>
 A;Cross-references: UNIPROT:Q07235 ; EMBL:X70296 ; PIDN:CAA49777.1 ; PID:95510
 A;Note: the nucleotide sequence was submitted to the EMBL Data Library, February 1993

C;Genetics:
 A;Gene: PN1.

A;Superfamily: Serpin
 C;Keywords: serine proteinase inhibitor

F;1-19/Domain: signal sequence #status predicted <SIG>
 F;20-397/Product: proteinase inhibitor nexin I #status predicted <MAT>

Query Match 28.9%; Score 575; DB 2; Length 397;
 Best Local Similarity 33.4%; Pred. No. 9-3e-31; Gaps 10;
 Matches 134; Conservative 93; Mismatches 152; Indels 22; Gaps 10;

Db 1 MDTFLMSILLIPLLFGSOASRSRAQQ-NTEPFLYQEVSLSH-KDNNTISPLGITLVLEM 58
 10 LTTVTLYSV----HSQFNSLSSLEEGLGSNTGIQVENQNIIKSRPHENVSPHGTASILGM 64
 Qy 59 VOLGAKGKAQOQIQTCLQOETSAGHEFLYLKSFCSAIISKKQETFTNIALANLYLQEGR 118
 Db 65 LQLGADGKTKQKLQSTVRYNNGVGK--VIIKKINKAVSKRNQDIVTANAVLNGPK 121
 Qy 119 VKEQYIHNKEPQFQSAIKLVDFOAKACAMISTVAKERDKGKIKDMFSGEEF-GPLTRL 177
 Db 122 MEVPFAFRNKDVQCEVQNYNFQDPSASEINFVNKNRGMIDNLNSNLIGALRL 181
 Qy 178 VLNVATYFKGDWKQKFKEKDOLINFTKNGSTVKTIPMMCALLRTKYGYF-SESSLNTQV 236
 Db 182 VLNVAYTEFKGLKMSRFQESTKRTFVAGDSKSYQMLAQSVRSGSTRPGLWWNF 241
 Qy 237 LEFSYKGDFSLILIAE-GMDIEVEKLITAQQLKWESEMQBEEVEISLPRFKVZK 295
 Db 2442 TELPYHGESISMIALPTESSSTPLSAIIPHITTKTIDSMWNTMVKRMOLVLPKETAVQ 301
 Qy 296 VDFKDVYSLNITEIFs-GGDLGSGITDSSEVYVSOTKVFFEINDGSEBAATSTGHI 354
 Db 302 TDIKEPKALGITEM?PSKANFKTIRTSLSHVSHLQAKIEVSDEGKASAT---- 357
 RESULT 11

A35032
 plasminogen activator inhibitor 1 precursor - rat
 C;Species: Rattus norvegicus (Norway rat)
 C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004

Db 302 TDIKEPKALGITEM?PSKANFKTIRTSLSHVSHLQAKIEVSDEGKASAT---- 357
 C;Accession: A35032 ; UT0490 ; A65581 ; A39120
 R;Brzudinski, C.J.; Riordan-Johnson, M.; Nordby, B.C.; Gelehrter, T.D.
 J. Biol. Chem. 265, 2078-2085, 1990

A;Title: Isolation and characterization of the rat plasminogen activator inhibitor-1 ge
 A;Reference number: A35032 ; MUID:90130456 ; PMID:2298740
 A;Accession: A35032

A; Molecule type: DNA <BRU>
A; Residues: 1-402 <BRU>
A; Cross-references: UNIPROT:P20961; GB:J05206; PID:9205965; MUID:3149611
R; Zehar, R.; Gelehrter, T.D.
Gene 73, 459-468, 1988
A; Title: Cloning and sequencing of cDNA for the rat plasminogen activator inhibitor-1.
A; Reference number: JTC0490; MUID:89211983; PMID:3149611
A; Accession: JTC0490
A; Molecule type: mRNA
A; Residues: 1-402 <ZEH>
A; Cross-references: GB:M24067; PID:9577500; PID:AAA56856_1; PID:9577501
R; Newmann, M.J.; Jane, E.A.; Iannotti, A.M.; Nugent, M.A.; Pepinsky, R.B.; Keski-Oja, J.
Endocrinology 126, 2936-2946, 1990
A; Title: Characterization and purification of a secreted plasminogen activator inhibitor on in transfected NRK cells.
A; Reference number: A60581; MUID:90276328; PMID:2190800
A; Accession: A60581
A; Molecule type: protein
A; Residues: 24-48 <NEW>
R; Olson, J.J.A.; Shiverick, K.T.; Ogilvie, S.; Buhi, W.C.; Raizada, M.K.
Proc. Natl. Acad. Sci. U.S.A. 88, 1928-1932, 1991
A; Title: Angiotensin II induces secretion of plasminogen activator inhibitor 1 and a tie
A; Reference number: A39120; MUID:9115619; PMID:2000398
A; Status: preliminary
A; Molecule type: protein
A; Residues: 24-43, G<COLS>
C; Genetics:
A; Intros: 91/1; 169/1; 234/1; 300/2; 334/1; 363/1; 391/1
C; Superfamily: Serpin
C; Keywords: Glycoprotein
F; 1/23/Domain: signal sequence #status predicted <STR>
F; 2/4-402/Domain: plasminogen activator inhibitor-1 #status experimental <STR>
F; 88/232-288/352/Binding site: carbohydrate (Asn) (covalent) #status predicted
F; 3/369/Inhibitory site: Arg (plasminogen activator) #status predicted
Query Match Score 570.5; DB 1; Length 402;
Best Local Similarity 33.4%; Conservative 83; Mismatches 171; Indels 11; Gaps 7;
Matches 132; Conservatice 132; Mismatches 330; Indels 11; Gaps 7;
Qy 3 TIFLWSLIUFFGSDASRC---SAQKNTBEFAVDLYQEVLSSHDK-NIIFSPVGITLVLE 57
Db 8 TCLTGLVLVFGKGAFSPVLPESHTAAQQATNFGVYKVQVQASKDRNVPSPVGSSVLA 67
Qy 58 MVQLGAKGQQQTQLMKQETSAGEETVLKSFCSAISEKQKETPNLANALYIQEGL 117
Db 68 MLQTTAGKTROQDAMGNFNSERGTA-PALKLSKLGMGNKNDISTADAIYORDL 126
Qy 118 TVKEQYLHGNKEFPOSATIKLVDPODAAKACEMISTWERTDKIKUMPSGFEGPILTR 177
Db 127 ELVQGFMPFFKPLFRTTVQDFSEVERARFLINDWERTHTGMISDLAKAVNEITL 186
Qy 178 VLNRAIYFCKDWKCFRKEDTOLINFTKNGSTVTKPMKALLRTKYGYF-SESSLNYQV 236
Db 187 VLNRAIYFQWKTPELEASTQRLFHKSDGTSIVPMMAQNKKFNTEFTPDGHEDYDI 246
Qy 237 LEISYKGDFFSLITLPAS-GMDIEEVKELITIAQQLKWLWIMSQEEBEVLSUPRFKEQK 295
Db 247 LELPYHGETLSMFAAPFFKDPLUSAATNLDAELRQWSNTRPLLLPKFLETEI 306
Qy 296 VDFKDVLYSNLTIFSG-GCDLGSITDSEVYVSVQTKYFFEINEGDGSAATSGIGI 354
Db 307 VDUGFMPFLGKMTDIFSSQADTSLSQEQLSVAQALQKVIENSGTVASSSTAILV 366
Qy 355 PVINSLAQSOPIANHPFLIMKPNTPESIILMGRVTPN 392
Db 367 SARM-APPMVLDRSFJFVVRENTPTEFLFGQLMBP 402

RESULT 13
B27496
A; Molecule type: mRNA
A; Residues: 1-397 <SM>
A; Cross-references: UNIPROT:P07092; GB:MI7784; PID:9204283; PID:AAA41209_1; PID:9204284
A; Note: the authors translated the codon TGG for residue 156 as Thr
R; Nick, H.; Hofsteenge, J.; Shaw, E.; Rovelli, G.; Monard, D
Biochemistry 26, 6407-6410, 1987
A; Title: DNA sequence coding for a rat glia-derived nexin and its homology to members of the nexin family
A; Reference number: A90519; MUID:88107544; PMID:3427015
A; Accession: B27496
A; Molecule type: mRNA
A; Residues: 1-397 <SM>
A; Cross-references: UNIPROT:A42351; B42351; C42351
R; Sommer, J.; Gloer, S.M.; Rovelli, G.F.; Hofsteenge, J.; Nick, H.; Meier, R.; Monard, D
Biochemistry 26, 6407-6410, 1987
A; Title: Functional sites of glia-derived nexin (GDN): importance of the site reacting w
A; Reference number: A34538; MUID:90248459; PMID:2337608
A; Accession: A34538
A; Status: preliminary

RESULT 12
A5788
protease inhibitor Spi3 - mouse
C; Species: Mus musculus (house mouse)

A;Title: Protease nexin. Properties and a modified purification procedure.

A;Reference number: A24051 ; MUID:85207723 ; PMID:3997857

A;Accession: A24051

A;Molecule type: protein

A;Residues: 20-47 <SCO>

C;Genetics:

A;Gene: GDB:PI7; PNI

A;Cross-references: GDB:378380 ; OMIM:177010

A;Map position: 2q33-2q35

C;Superfamily: Serpin

C;Keywords: alternative splicing; glycoprotein; serine protease inhibitor
P;1-19/Domain: signal sequence #status predicted <SG>

P;20-398/Product: glia-derived nexin I, splice form beta #status experimental <MTA>
P;328 , R'331-398/Product: glia-derived nexin I, splice form alpha #status predicted
P;118-159 , 384/Binding site: carbohydrate (Asn) (covalent) #status predicted
P;365/Inhibitory site: Arg (thrombin, urokinase) #status predicted

Query Match 28 21%; Score 558; DB 2; Length 398;

Best Local Similarity 32.7%; Pred. No. 1.2e-29;
Matches 132; Conservative 90; Mismatches 156; Indels 26; Gaps 11;

Qy 7	WSLLLFEGSGA-SRCS-----AQRNTEPAVDLYQEVSLSH-KDNLTFSPLGILTVL	56
Db 3	WHLPLFLASVTLPLSTCNSHNPNSLEELGSNTGQIVNQIVKSRPHDNIVISHGIASTL	62
Qy 57	ENVQLGAKRAQQQTROTQLQETTAEGEFLVLSFCSAISERKQEFITNLANALYLOG	116
Db 63	GMLQLGADGRTKKQKLAAMVRYGVNGVK--ILKINKAIKVSKKNKDITVANAVFKNA	119
Qy 117	FTVKREQYLHNKEFFOSA1KLVDFOAKAEMISTWBRKTGDKIKDMGSREF-GPLT	175
Db 120	SEIEVPFTVANKDVFQCEVNVNFDDPASACDSINAWFNETRDMDNLSPDIDYT	179
Qy 176	RLVLVNAIYFKGDWQKFRKEDTCLINFTKNGSTVKLPMKALLRTKXGYFS-ESSINY	234
Db 180	RLVLVNAVFKGLWGRSQRFQENTIKRTTFRADGKSYQVMMLAQSVFGGSTAPNDIWX	239
Qy 235	QVLEFLSYKGDEFSLILIPAE-GMDIEEVKLITAQQIKWLSEMQRVEEISLPRKVE	293
Db 240	NFIELLYHGEBISMJIALPTESSTPLSATAIPHISTKTIDSMSTMVPRVOVLPKETA	299
Qy 294	QKUDFEDVLYSLNITBIF-SGGCDLSGIDSE-NVYSSVTQKOFFEINEDGEBAATSTG	351
Db 300	AQTDLKEPEPLKVGTDMPDSKANFAKTTGSENLUHVSHLQKIEVSEDTKASAT-	358
Qy 352	IHIPVIMSLQSQ---FIAMHPFLTIMKHNPTESTILEMGRVTNP	392
Db 359	----TAILIARSSPPWFIVDRPFLFFIRNPTEGAVLNGQINKP	398

Search completed: October 21, 2004, 06:46:13

Job time : 41 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 21, 2004, 06:33:26 ; Search time 193 Seconds
(without alignments)
1166.637 Million cell updates/sec

Title: US-10-628-395-2
Perfect score: 1987
Sequence: 1 MDTFLWSSLILFFGCSQASR.....FINKHNPTESTILEMGRVTNP 392

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : UniProt 02-*
1: uniprot_sprot:
2: uniprot_trembl:
*:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query	Match	Length	DB ID	Description	
1	99.2	BAC34756	38.1	2	BAC34756	Bacillus subtilis	
2	1524	Q61k88	405	1	SPI2_HUMAN	Q61k88 homolog (putative)	
3	828.5	Q6GLT7	41.7	2	Q6GLT7	Xenopus laevis (Silurana) oocyte membrane protein	
4	79.5	NEUS_HUMAN	410	1	NEUS_HUMAN	Neurofibromatosis 1 protein	
5	78.8	NEUS_CHICK	39.7	1	NEUS_CHICK	Neurofibromatosis 1 protein	
6	76.2	NEUS RAT	38.4	1	NEUS RAT	Neurofibromatosis 1 protein	
7	76.2	AAB61536	38.4	2	AAB61536	Rattus norvegicus (Rattus norvegicus) protein	
8	75.7	NEUS MOUSE	38.1	1	NEUS MOUSE	Neurofibromatosis 1 protein	
9	75.7	BAC27727	38.1	2	BAC27727	Bacillus subtilis	
10	75.7	Q63547	38.1	2	Q63547	Q63547 Rattus norvegicus protein	
11	72.8	P29008	36.6	191	P29008	Homo sapiens	
12	64.9	S0C1_HUMAN	32.7	390	1	S0C1_HUMAN	Q9Ikb80 homolog (putative)
13	64.9	AAP3594	32.7	390	1	AAP3594	Q9Ikb80 homolog (putative)
14	64.7	Q86W04	32.6	390	2	Q86W04	Homo sapiens
15	64.0	Q8IXI3	32.2	390	1	Q8IXI3	Homo sapiens
16	63.6	S0C2_HUMAN	32.0	390	1	S0C2_HUMAN	Q9Ikb82 homolog (putative)
17	63.4	Q6HA07	31.9	407	2	Q6HA07	Q6HA07 branchiostoma floridae protein
18	62.7	Q86W05	31.6	390	2	Q86W05	Q86W05 homolog (putative)
19	62.3	Q86W03	31.4	390	2	Q86W03	Q86W03 homolog (putative)
20	61.8	Q9BYF7	31.1	369	2	Q9BYF7	Q9BYF7 homolog (putative)
21	61.5	Q8BHL1	31.0	387	2	Q8BHL1	Q8BHL1 homolog (putative)
22	61.4	Q6UKZ2	30.9	387	2	Q6UKZ2	Q6UKZ2 homolog (putative)
23	61.4	Q9D1QS	30.9	387	2	Q9D1QS	Q9D1QS homolog (putative)
24	61.4	AAB63756	30.9	387	2	AAB63756	AAB63756 musculus
25	61.1	Q9D154	30.8	379	2	Q9D154	Q9D154 musculus
26	61.1	Q6TGUI	30.7	384	2	Q6TGUI	Q6TGUI brachydanio
27	61.1	AAG97848	30.7	384	2	AAG97848	AAG97848 brachydanio
28	60.9	Q8BBK60	30.7	379	2	Q8BBK60	Q8BBK60 musculus
29	60.9	Q9D7SS	30.7	379	2	Q9D7SS	Q9D7SS musculus
30	60.8	Q8BG86	30.6	387	2	Q8BG86	Q8BG86 musculus
31	60.8	AAH63756	30.6	387	2	AAH63756	AAH63756 musculus

OM protein - protein search, using sw model	Run on: October 21, 2004, 06:33:26 ; Search time 193 Seconds (without alignments) 1166.637 Million cell updates/sec	Title: US-10-628-395-2 Perfect score: 1987 Sequence: 1 MDTFLWSSLILFFGCSQASR.....FINKHNPTESTILEMGRVTNP 392	Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5
32	604	30.4	378
33	604	30.4	388
34	603.5	30.4	377
35	603.5	30.4	377
36	603.5	30.4	405
37	595	29.9	405
38	594	29.9	376
39	588	29.6	392
40	587	29.5	388
41	586	29.5	1
42	579.5	29.2	379
43	579.5	29.2	379
44	578.5	29.1	387
45	578.5	29.1	387

ALIGNMENTS

RESULT 1	SP12_HUMAN	STANDARD:	PRT:	405 AA.
ID: SPI12_HUMAN	ID: SPI12_HUMAN			
AC: O75810;	AC: O75810;			
DT: 28-FEB-2003 (Rel. 41, Created)	DT: 28-FEB-2003 (Rel. 41, Last sequence update)			
DT: 05-JUL-2004 (Rel. 44, Last annotation update)	DT: 05-JUL-2004 (Rel. 44, Last annotation update)			
DB: Serpin 12 precursor (Myoepithelium-derived serine protease inhibitor)	DB: Serpin 12 precursor (Myoepithelium-derived serine protease inhibitor)			
GN: Name-SERPIN12; Synonyms=SP114, MEPR1.	GN: Name-SERPIN12; Synonyms=SP114, MEPR1.			
OS: Homo sapiens (Human).	OS: Homo sapiens (Human).			
OC: Bukaaryota; Metazoa; Chordata; Craniota; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; NCBITaxID:9606;	OC: Bukaaryota; Metazoa; Chordata; Craniota; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; NCBITaxID:9606;			
RN: [1]	RN: [1]			
RP: SEQUENCE FROM N.A.	RP: SEQUENCE FROM N.A.			
RX: MEDLINE=99287625; PubMed=9624529;	RX: MEDLINE=99287625; PubMed=9624529;			
RA: Ozaki K., Nagata M., Suzuki M., Fujiwara T., Miyoshi Y., Ishikawa O., Ohigashi H., Imao S., Takashashi E., Nakamura Y.;	RA: Ozaki K., Nagata M., Suzuki M., Fujiwara T., Miyoshi Y., Ishikawa O., Ohigashi H., Imao S., Takashashi E., Nakamura Y.;			
RT: "Isolation and characterization of a novel human pancreas-specific gene, pancreatic, that is down-regulated in pancreatic cancer cells."	RT: "Isolation and characterization of a novel human pancreas-specific gene, pancreatic, that is down-regulated in pancreatic cancer cells."			
RL: Genes Chromosomes Cancer 22:179-185(1998).	RL: Genes Chromosomes Cancer 22:179-185(1998).			
RN: [2]	RN: [2]			
RP: SEQUENCE FROM N.A.	RP: SEQUENCE FROM N.A.			
RX: MEDLINE=99199217; PubMed=10097100;	RX: MEDLINE=99199217; PubMed=10097100;			
RA: Xiao G., Liu Y.E., Gentz R., Sang Q.A., Ni J., Goldberg I.D., Shi Y.B.;	RA: Xiao G., Liu Y.E., Gentz R., Sang Q.A., Ni J., Goldberg I.D., Shi Y.B.;			
RT: "Suppression of breast cancer growth and metastasis by a serpin myoepithelial-derived serine proteinase inhibitor expressed in the mammary myoepithelial cells."	RT: "Suppression of breast cancer growth and metastasis by a serpin myoepithelial-derived serine proteinase inhibitor expressed in the mammary myoepithelial cells."			
RL: Proc. Natl. Acad. Sci. U.S.A. 96:3700-3705(1999).	RL: Proc. Natl. Acad. Sci. U.S.A. 96:3700-3705(1999).			
RN: [3]	RN: [3]			
RP: SEQUENCE FROM N.A.	RP: SEQUENCE FROM N.A.			
RC: TISSUE=Pancreas, and Spine;	RC: TISSUE=Pancreas, and Spine;			
RX: MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;	RX: MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;			
RA: Straubinger R.L., Feingold B.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Shemesh C.M., Schuler G.D., Altenschul S.F., Zeeberg B., Bustow R.F., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Caenavant T.L., Scheetz T.E., Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C., Raha S.S., Loqueland N.A., Peters G.J., Abramson R.D., Mullahy S.J., Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunarane P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Rulyk S.W., Villalba D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Faray J., Helton B., Ketteman M., Madan A., Shevchenko Y., Bouffard G.G., Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smialius D.E., Schnurch A., Schein E., Sanger J.E., Jones S.J.M., Marrs M.A.; RT: "Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences.";	RA: Straubinger R.L., Feingold B.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Shemesh C.M., Schuler G.D., Altenschul S.F., Zeeberg B., Bustow R.F., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Caenavant T.L., Scheetz T.E., Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C., Raha S.S., Loqueland N.A., Peters G.J., Abramson R.D., Mullahy S.J., Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunarane P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Rulyk S.W., Villalba D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Faray J., Helton B., Ketteman M., Madan A., Shevchenko Y., Bouffard G.G., Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smialius D.E., Schnurch A., Schein E., Sanger J.E., Jones S.J.M., Marrs M.A.; RT: "Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences.";			

RL Proc. Natl. Acad. Sci. U.S.A. 99:1689-16903 (2002).
 CC -!- SUBCELLULAR LOCATION: Secreted (Probable).
 CC -!- TISSUE SPECIFICITY: Expressed in Pancreas and adipose tissues.
 CC -!- SIMILARITY: Belongs to the serpin family.

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CC DR AB006422; BAA33766.1;
 DR EMBL: AF30470; ADD3473.1; -.
 DR EMBL: BC027859; AAH27859.1; -.
 DR HSSP; P01120; 1JXR.
 DR GenBank: B9445; SERPIN12.
 DR MIM: 605587; -.
 DR GO:0004867; Faserrine-type endopeptidase inhibitor activity; TAS.
 DR GO:0006928; Peptidase inhibitor activity; TAS.
 DR InterPro: IPR00025; Prot_inh_serpin.
 DR Pfam: PF00079; Serpin_1.
 DR SMART: SM00393; SERPIN_1.
 DR PROSITE: PS00284; SERPIN_1.
 DR Glycoprotein; Serine protease inhibitor; Serpin; Signal.
 ET SIGNAL 1 18 Potential.
 FT CHAIN 19 405 Serpin 12.
 FT SITE 357 358 Reactive bond (By similarity).
 FT CARBCHYD 202 202 N-Linked (GlcNAc . .) (Potential).
 FT CARBOHYD 207 207 N-Linked (GlcNAc . .) (Potential).
 FT CARBOHYD 306 306 N-Linked (GlcNAc . .) (Potential).
 SQ SEQUENCE 405 AA; 461-45 MW; 5BA18C60E4FDE9A4 CR064;

Query Match Score 1972; DB 1; Length 405;
 Best Local Similarity 99.5%; Pred. No. 5.6e-125; Indels 0; Gaps 0;
 Matches 330; Conservative 0; Mismatches 2;

QY 1 MDTIFLWSLILLFFGQSARCSAQKNTFEAVDLYQEVSLSHKDNITFSPLGITLVLEMVQ 60
 Db 1 MDTIFLWSLILLFFGQSARCSAQKNTFEAVDLYQEVSLSHKDNITFSPLGITLVLEMVQ 60

QY 61 LGAKGKAQQCQIROTQKQETTSQEEFLVLSKPSAISEKQKQETTFENALANLYLQECFTVK 120
 Db 61 LGAKGKAQQCQIROTQKQETTSQEEFLVLSKPSAISEKQKQETTFENALANLYLQECFTVK 120

QY 121 EQVHLGNKEFFQQA1KLVDQDAKACAM1STWVERKTGK1KDMPSGEFGPLRVLV 180
 Db 121 EQVHLGNKEFFQQA1KLVDQDAKACAM1STWVERKTGK1KDMPSGEFGPLRVLV 180

QY 181 NAVYFGDKWQKPERKDQLINTPKTGSKV1PKMKAALLTKYGFSESSLNYQVLELS 240
 Db 181 NAIVYFGDKWQKPERKDQLINTPKTGSKV1PKMKAALLTKYGFSESSLNYQVLELS 240

QY 241 YKGBDEFSLI1LPAEGMDIEEVKLTAQQLKWLSEMOEREEVEISLSPRFLVEMVQDFKD 300
 Db 241 YKGBDEFSLI1LPAEGMDIEEVKLTAQQLKWLSEMOEREEVEISLSPRFLVEMVQDFKD 300

QY 301 VLYSLNITEIPSGCDLSGIDTSSEYYVSYQTOKVFFEINEDGESEATSTGHIPVIMSL 360
 Db 301 VLYSLNITEIPSGCDLSGIDTSSEYYVSYQTOKVFFEINEDGESEATSTGHIPVIMSL 360

QY 361 AQSQFIANTHPFLFIMKINPTESENGLGRVTP 392
 Db 361 AQSQFIANTHPFLFIMKINPTESENGLGRVTP 392

RESULT 2
 SP12_MOUSE STANDARD PRT; 405 AA.
 AC Q9J88; Q9D8Z3; Q9D955;
 DT 28-FEB-2003 (Ref. 41, Created)
 DT 28-FEB-2003 (Ref. 41, Last sequence update)

DR 05-JUL-2004 (Ref. 44, last annotation update)
 DE Serpin 12 precursor (Serine protease inhibitor 14).
 GN Name-Serpin1; Synonyms-Spi1;
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Murinae; Mus.
 OC NCBI-TaxID=10900;
 RN [1] -
 RN SEQUENCE FROM N.A.
 RC TISSUE=Pancreas;
 RA Chang W.S., Lin S.C., Wu C.W.; "Isolation and characterization of mouse pancreas-specific serpin gene," submitted (MAR-2000) to the EMBL/GenBank/DBJ databases.
 RN [2]
 RN SEQUENCE FROM N.A.
 RC STRAIN=C57BL/6J; TISSUE=Pancreas; DOI=10.1038/nature01266;
 RX MEDLINE=22345483; PubMed=12466851;
 RA Okazaki Y., Furuno M., Kasahara T., Adachi J., Bono H., Kondo S., Nikaido I., Osato N., Saito R., Suzuki H., Yamamoto T., Kiyosawa H., Yagi K., Tomaru Y., Hasegawa Y., Nagami A., Schonbach C., Golobori T., Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J., Schriml L.M., Kanspin A., Matsuda H., Batalov S., Beisel K.W., Blake J.A., Bradt D., Choihia C., Batalov S., Corbani L.E., Cousins S., Dalla B., Dragani T.A., Fletcher C.F., Forrest A., Frazer K.S., Gaasterland T., Gerbaldi M., Gissi C., Godzik A., Gough J., Grummond S., Gustincic S., Hirakawa N., Jackson J.J., Jarvis E.D., Kanai A., Kawaji H., Kawasawa Y., Kezierski R.M., King B.L., Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A., Maglott D.R., Maltais L., Marchionni L., McKenzie L., Maki H., Nagashima T., Numata K., Orido T., Pavani W.J., Perreia G., Peole G., Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S., Ravasi T., Reed J.C., Reid J., Ring B.Z., Ringwald M., Sandelin A., Schnider C., Semple C.A., Setou M., Shimada K., Sultana R., Takenaka Y., Taylor M.S., Teasdale R.D., Tonita M., Verardo R., Wagner L., Wahlestedt C., Yano Y., Watanabe Y., Wells C., Wilming L.G., Wynshaw-Boris A., Yangnisawa M., Yang Y., Yang L., Yuan Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N., Hirono-Kishikawa T., Konno H., Nakamura M., Sakazume N., Sato K., Shiraki T., Waki K., Kawai J., Aizawa K., Arakawa T., Fukuda S., Hara A., Hashizume W., Inomaki K., Ishii Y., Itoh M., Kagawa I., Miyazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A., Yasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J., Birney E., Hayashizaki Y.; "Analysis of the mouse transcriptome based on functional annotation of RT 60,77 full-length cDNAs"; Nature 420:563-573 (2002).
 CC -!- SUBCELLULAR LOCATION: Secreted (probable).
 CC -!- TISSUE SPECIFICITY: Expressed in pancreas.
 CC -!- SIMILARITY: Belongs to the serpin family.

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CC EMBL; AF251276; AAP65821.1; -.
 DR EMBL; AK007347; BAB24976.1; -.
 DR HSSP; P01008; 1A9H.
 DR MGD; MG1:1915181; Serpin12; InterPro: IPR000215; Prot_inh_serpin; Pfam: PF00009; Serpin1.
 DR Glycoprotein; Serine protease inhibitor; Serpin; Signal.
 FT SIGNAL 1 18 Potential.
 FT CHAIN 19 405 Serpin12.
 FT SITE 357 358 Reactive bond (by similarity).
 FT CARBOHYD 306 306 N-linked (GlcNAc . .) (Potential).
 PT 5 I -> M (in Ref. 2; BAB25079).

PT	CONFLICT	195	195	K -> T (in Ref. 2; BAB24976).	RT "Generation and initial analysis of more than 15,000 full-length human
PT	CONFLICT	207	207	D -> S (in Ref. 2; BAB24976).	RT and mouse cDNA sequence.";
PT	CONFLICT	212	218	KVPMKA -> RVPTEV (in Ref. 2; BAB24976).	RT Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
PT	CONFLICT	246	246	F -> Y (in Ref. 2; BAB24976).	RN [2]
SQ	SEQUENCE	405 AA:	45775 MW:	04DF38BE8545DF8 CRC64;	RP SEQUENCE FROM N.A.
Query Match	Best Local Similarity	76.7%	Score 1524;	DB 1; Length 405;	RC TISSUE=Brain;
Db	Matches 296;	Conservative	75.5%:	Prod. No. 1e-94;	RX MEDLINE=22341132; PubMed=12454917;
QY	1	MDTFLWLLLPGSOQRCSAQKNTTAVDLYQEYSLKNDNTIFSPLGLTIVLEMVQ 60	RA Klein S.L., Strausberg R.L., Wagner L., Pontius J., Clifton S.W., Richardson P.; "Genetic and genomic tools for Xenopus research: The NIH Xenopus RT Initiative"; RT initiative.		
Db	1	MNKTLWSEFLFGSQTCSRATQKIAFADYIKAISLSHKNNIISPLGTTMLGMVQ 60	RL Dev. Dyn. 225:384-391 (2002).		
QY	61	LGAKGKAQQOIQRTLQKQETSAGBFLUKSFCSAISPKKOFETENANALYLOEGFTVK 120	RN [3]		
Db	61	LGAKGKAQQOQLKLTRMGTPAGEFSTLKSLSAISKKQETNTASALYLOEGFTVK 120	RP SEQUENCE FROM N.A.		
QY	121	EQYHGNREFFQOSAIKLUFDQDACAEMISTVERKDGIKIDMGSBEEFPLTRVLV 180	RC TISSUE=Brain;		
Db	121	ETYLHSNREFFQOSATKLVDFLDAKTSQAISTAVESKDGIKIDMGSBEEFPLTRVLV 180	RA Klein S., Strausberg R., Pontius J., Clifton S.W., Richardson P.; "Genetic and genomic tools for Xenopus research: The NIH Xenopus RT initiative"; RT initiative.		
QY	181	NAIYFGDKWQKFEREDTLINFKRNGSTVKIPIIMKLLRYKGYSESSSYNQVLES 240	RL Dev. Dyn. 225:384-391 (2002).		
Db	181	NAIYFGDKWQKFEREDTLINFKRNGSTVKIPIIMKLLRYKGYSESSSYNQVLES 240	RN [4]		
QY	241	YKGDEFSLITLPAEGMDIEBEVERKLITACQILKWLSENQEEVEISLPRFKVQKVDFRD 300	RP SEQUENCE FROM N.A.		
Db	241	YKADEFSLITLPAEGMDIEBEVERKLITACQILKWLSENQEEVEISLPRFKVQKVDFRD 300	RC TISSUE=Brain;		
QY	301	VLYSUNITEFSGGGDLGGTDSSEVVYQVTOXVFEDGEAASTGTHIPVIMSL 360	RA Klein S.L., Strausberg R.L., Wagner L., Pontius J., Clifton S.W., Richardson P.; "Genetic and genomic tools for Xenopus research: The NIH Xenopus RT initiative"; RT initiative.		
Db	301	ALYSUNITEFSGGGDLGGTDSSEVVYQVTOXVFEDGEAASTGTHIPVIMSL 360	RN [5]		
QY	361	AQSOFIANHPFLFIMKHNPTESTILFMGRYTNP 392	RC TISSUE=Brain;		
Db	361	TOTQFLANHPFLFILKHIRTESILFMGRYTNP 392	RA Klein S.L., Strausberg R.L., Wagner L., Pontius J., Clifton S.W., Richardson P.; "Genetic and genomic tools for Xenopus research: The NIH Xenopus RT initiative"; RT initiative.		
RESULT 3	Q6GJ77	PRELIMINARY;	PRT;	410 AA.	RESLT 4
ID	Q6GJ77				RESULTS_HUMAN STANDARD; PRT; 410 AA.
AC					RESULTS_HUMAN STANDARD; PRT; 410 AA.
DT	05-JUL-2004	(TREMBUREL 27, Created)	QY	182	ATYFGDWKOKPFKEQDQLNFTKNGSTKIPMKALLRKTQYGFSESSLN---YQVL 237
DT	05-JUL-2004	(TREMBUREL 27, Last sequence update)	Db	183	ALYFKGWKSQFRPENTRTFPTKODESEYQIPMTYQKGBFYYGFTDGSNEAGVYQVL 242
DT	05-JUL-2004	(TREMBUREL 27, Last annotation update)	QY	238	ELSYKGDBEFSLIILPAEGMDIEEYRFLQVWLSQEQEEVLSLPRFKVQVDFRD 297
DE	Hypothetical protein.		Db	243	ELPYGEBEISLIIILSRQEPLATIPLKAPLIEEWANSVKKQKVEVYLPRFKVEVN 302
OS	Xenopus laevis (African clawed frog).		QY	298	FKDVLYSLNITBIFSGGCDLSGITDSEVYVSQVTOKVFFEDGEAAATSTGHRIPV 357
OC	Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;		Db	303	LKDILNLGLTJKIFSGPADLSAISDSKDLFARVTKHSFLLEVNEGAEEASSGMANSR 362
OC	Ampibia; Batrachia; Anura; Mesobatrachia; Pipidae;		QY	358	MSLAQSOFIANHPFLFIMKHNPTESTILFMGRYTNP 392
OC	Xenopodinae; Xenopus.		Db	363	MAVLYPQVYDHFPEFLIRNRKTGSYLFMGRVMHP 397
OX	NCBI_TAXID=8355;				
RN	SEQUENCE FROM N.A.				
RP					
RC	TISSUE=Brain;				
RC	MEDLINE=22341132; PubMed=12454917;				
RA	Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,				
RA	Klauder R.D., Collins F.S., Wagner L., Shemesh C.M., Schuler G.D.,				
RA	Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Blat N.K.,				
RA	Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,				
RA	Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,				
RA	Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,				
RA	Klauder R.D., Collins F.S., Wagner L., Shemesh C.M., Schuler G.D.,				
RA	Baha S.S., Logueillo N.A., Peters G.J., Abramson R.D., Mullahy S.J.,				
RA	Bosak S.A., McEwan P.J., McKernan K.J., Malik J.A., Gurarutne P.H.,				
RA	Villalona D.K., Worley K.C., Hale S., Garcia A.M., Gibbs R.A.,				
RA	Fahey J., Helton B., Ketteman M., Madan A., Rodriguez S., Sanchez A.,				
RA	Whiting M., Madan A.C., Shevchenko Y., Bouffard G.G.,				
RA	Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,				
RA	Rodriguez A.C., Grinwood J., Schmitz J., Myers R.M., Butterfield Y.S.,				
RA	Krzewinski M.I., Skalska U., Smalius D.E., Schein J.E., Schein J.E.,				
RA	Jones S.J., Matra M.A.,				

[1]	SEQUENCE FROM N.A.	
RP	RPQUENCE FRCM N.A.	
RC	TISSUE=Retina;	
RX	MEDLINE=970919; PubMed=970919;	
RA	Schriftpf S.P., Bleeker A.J., Brecevic L., Kozlov S.V., Berger P.,	
RA	Osterwalder T., Krueger S.R., Schinzel A., Sonderreger P.;	
RT	"Human neuroserpin (P112); cDNA cloning and chromosomal localization to 3q26.";	
RT	Genomics 40: 55-62 (1997).	
RL		
RN	[2]	
RP	SEQUENCE FROM N.A.	
RA	Kinter J., Berger P., Kozlov S.V., Sonderreger P.;	
RT	"Genomic organization of the human neuroserpin (P112) gene."	
RL	Submitted (MAR-2000) to the EMBL/GenBank/DBJ/GenBank/DBJ databases.	
RN	[3]	
RP	SEQUENCE FROM N.A.	
RC	TISSUE=Brain;	
MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;		
RA	Strasburger R.L., Feingold E.A., Grouse L.H., Derge J.G.,	
RA	Klausner R.D., Collins F.S., Wagner L., Shernmen C.M., Schulter G.D.,	
RA	Altschuler R.D., Buetow K.H., Schaeffer C.F., Bhat N.K.,	
RA	Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,	
RA	Diatchenko L., Matsusawa K., Farmer A.A., Rubin G.M., Hong L.,	
RA	Singleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,	
RA	Brownstein M.J., Urdin T.B., Toshiyuki S., Carninci P., Prange C.,	
RA	Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,	
RA	Bosack S., McEwan P.J., McFernan K.C., Hale S., Gunaratne P.H.,	
RA	Richards S., Worley K.C., Munro D.M., Sonderreger E.J., Gay L.J., Hulyk S.W.,	
RA	Villalon D.K., Munro D.M., Sonderreger E.J., Lu X., Gibbs R.A.,	
RA	Faney J., Melton E., Kettman J.W., Young A.C., Rodriguez S., Sanchez A.,	
RA	Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,	
RA	Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,	
RA	Rodriguez A.C., Grimmwood J., Schmutz J., Myers R.M.,	
RA	Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smilus D.E.,	
RA	Schnerr A., Schein J.E., Jones S.J.M., Marra M.A., Marra M.A.,	
RT	"Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences.";	
RL	Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).	
RN	[4]	
RP	VARIANTS FEN1B PRO-49 AND ARG-52.	
RX	MEDLINE=99445223; PubMed=10317635;	
RA	Davis R.L., Shrimpton A.E., Holohan P.D., Bradshaw C., Feigin D.,	
RA	Collins G.H., Sonderreger P., Kinter J., Becker L.M., Lacbawan F.,	
RA	Krasniewich D., Muenke M., Lawrence D.A., Yerby M.S., Shaw C.M.,	
RA	Gooptu B., Elliott P.R., Finch J.T., Carroll R.W., Lomas D.A.,	
RT	"Familial dementia caused by polymerization of mutant neuroserpin.";	
RL	Nature 401:376-379 (1999).	
CC	-!- FUNCTION: Serine protease inhibitor that inhibits plasminogen activators and plasmin but not thrombin. May be involved in the formation or reorganization of synaptic connections as well as for synaptic plasticity in the adult nervous system. May protect neurons from cell damage by tissue-type plasminogen activator.	
CC	-!- SUBCELLULAR LOCATION: Secreted.	
CC	-!- TISSUE SPECIFICITY: Predominantly expressed in the brain.	
CC	-!- DISORDER: Defects in SERPIN11 are the cause of familial encephalopathy with neuroserpin incision bodies (FEN1B) [MIM:604218]. FEN1B is characterized clinically as an autosomal dominantly inherited dementia, histologically by unique neuronal inclusion bodies and biochemically by polymers of neuroserpin.	
CC	-!- SIMILARITY: Belongs to the serpin family.	
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CC	DR EMBL: BC018043; AAH18043..1; -.	
DR	HSSP: O35684; 1JJ0.	
DR	Genew: HGNC:8943; SERPIN1.	
DR	MIM: 604218; -.	
DR	GO; GO:0007417; F:serine-type endopeptidase inhibitor activity; TAS.	
DR	GO; GO:0007422; P:central nervous system development; TAS.	
DR	IntePro; IPR00011; Prot_inh_serpin.	
DR	Pfam; PF00079; Serpin; 1.	
DR	SMART; SM0093; SERPIN; 1.	
DR	PROSITE; PS00284; SERPIN; 1.	
DR	Disease mutation; Glycoprotein; Serine protease inhibitor; Serpin; Serine protease inhibitor; Serpin; 1.	
RN		
RN		
RP	KW SIGNAL.	Potential.
FT	FT SIGNAL.	
FT	FT CHAIN.	
FT	FT SITE.	Reactive bond (By similarity).
FT	FT CARBOHYD.	N-linked (Glycan . .) (Potential).
FT	FT CARBOHYD.	N-linked (Glycan . .) (Potential).
FT	FT CARBOHYD.	N-linked (Glycan . .) (Potential).
FT	FT VARIANT.	S->P (in FEN1B; Syracuse).
FT	FT VARIANT.	/PTId=VAR0052.
FT	FT VARIANT.	S->R (in FEN1B; Portland).
FT	FT VARIANT.	/PTId=VAR00821.
FT	FT CONFLICT.	K->E (in Ref. 3).
FT	FT CONFLICT.	S->Y (in Ref. 3).
FT	FT CONFLICT.	326 46427 MW; D966E9036BBB21943 CRC64;
SQ	SEQUENCE 410 AA;	
Query Match	39.8%; Score 791.5; DB 1; Length 410;	
Matches 155; Conservative 97; Mismatches 135; Indels 5; Gaps 2;		
Qy	6 LWSLLLFQGSGAQSRCQAQNTPEAVDILYQEVSLSHKD-NIIFSPGLITVLEMVQLGAK 64	
Db	6 LFSLLVLQSMATGATEPEEAIDLSVNNYMLRATGGDENILEPLSIALANGNMELGAQ 65	
Qy	65 GKAQQQIOTLKKQETTSAGEEEFLVKSFCSAISEKQDFTENALANLYQEGFTVKQYOL 124	
Db	66 GSTQKEIRHSMGYDLSLRNGEEBFSFLKEFSNMVTAKEQYVMKIANSSIFVQNGFHVNEEFL 125	
Qy	125 HGKEFQOSAIKLVDFQDAKACEMISSTWVERKTDDGKIDMPSGEEEFGPLTRVLYVAY 184	
Db	126 QMMKRYFNAAVNHYDFDSQVAVANYINQWVENTNNVYKDLVSPRDAAATYLALNAVY 185	
Qy	185 FKGDWKQKPFKEDTQLINFTKNGSYKIPKMMKALLRTKYGYSSESSLN---YQVTELS 240	
Db	186 FKGNWKSQRPENTRTFSKTDDESEVQIPMNYQQGFFYYGFSDGGEAAGGIYQVEIIP 245	
Qy	241 YKGEDFSLLIIIDAEQMDIEEVKLIATAQKQIWLSEMQEEEVEISPRFKYEQVKFD 300	
Db	246 YEGEBISMMVLSRQEVTPLVYQQLVBEAWNSVKKVQEYVYPRFTVEQELDKD 305	
Qy	301 VLYVSNLNTIFSGCDLSGIDTSEBVYVSQTVQVFEPINEDGESEATSTGHIPVMSL 360	
Db	306 VLAZGIEIFPKDANLTGLSDNEIKLPSKAHKSFLEVNEEGSEAIAVSGMAISRMAV 365	
Qy	361 AQSOFIANHPFLIMKINPNTESILFMGRVTNP 392	
Db	366 LYPOVIVDHPPFLIRRTGTLFMGRVMHP 397	
RESULT 5		
NEU_CHEK CHICK STANDARD PRT; 410 AA.		
ID Q90935; STANDARD PRT; 410 AA.		
AC DT 15-JUL-1998 (Ref. 36, Created)		
DT DT 15-JUL-1998 (Ref. 36, Last sequence update)		
DE DE Neuroserpin precursor (Axonin-2).		
GN Name=SERPIN1; Synonyms=Pr12;		
OS Gallus Gallus (Chicken).		
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Galliformes; Phasianidae; Galliformes; Neognathae; Aves; Archosauria; OC		

Gallus.		Qy 358 MSLAQSOPIANHPPFLIMKHNPTESILFMGRVTPP 392
NCBI_TaxID=9031;		Db 363 MAVLYFQIVDHPFFPLVRNRRTGTVLFGMGRVMP 397
[1]		
OX STRAIN="White leghorn; TISSUE=Brain;		
RN RX SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.		
RC Sonderegger P.; Osterwalder P., Contartese J., Stoerckli E.T., Kuhn T.B.,		
RA MEDLINE=96272154; PubMed=8607095;		
RA RX "Neuroserpin, an axonally secreted serine protease inhibitor.";		
RT EMBO J. 15: 2944-2953 (1996).		
CC -!- FUNCTION: Serine protease inhibitor that inhibits plasminogen activators and plasmin but not thrombin. May be involved in the formation or reorganization of synaptic connections as well as for synaptic plasticity in the adult nervous system. May protect neurons from cell damage by tissue-type plasminogen activator.		
CC -!- SUBCELLULAR LOCATION: Secreted.		
CC -!- TISSUE SPECIFICITY: In the embryo present in retina, brain, cerebellum and spinal cord. In adult, predominantly expressed in the brain.		
CC -!- SIMILARITY: Belongs to the serpin family.		
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DR EMBL; Z71930; CAA96493.1; -.		
DR PIR; S70647; S70647.		
DR HSSP; O35684; 1JJO.		
DR InterPro; IPR00015; Prot_inh_serpin.		
DR Pfam; PF00079; Serpin; 1.		
DR SMART; SM00093; SERPIN; 1.		
DR PROSITE; PS00284; SERPIN; 1.		
KW Direct protein sequencing; Glycoprotein; Serine protease inhibitor; Serpin; Signal.		
FT SIGNAL 1 16 Neuroserpin.		
FT CHAIN 17 410 Reactive bond (By similarity).		
FT SITE 362 363 N-linked (GlcNAc. . .) (Potential).		
FT CARBOHYD 157 157 N-linked (GlcNAc. . .) (Potential).		
FT CARBOHYD 401 401 N-linked (GlcNAc. . .) (Potential).		
FT SEQUENCE 410 AA; 46529 MW; D5B3B03E77F5FC64 CRC64;		
Query Match 39.7%; Score 788.5; DB 1; Length 410; Best Local Similarity 40.0%; Pred. No. 4.8e-45; Indels 92; Mismatches 138; Gaps 3;		
Matches 158; Conservative 92; Mismatches 138; Indels 7; Gaps 3;		
Qy 5 FLWSLLFLFGQSQRSQSAQNT--EFADVLQYQVSLSHKD-NIIFPLGITLVLEMVQL 61		
Db 3 FLGLLSLVLPSKAFTNFDETTIAELSVNVNQRLAAREDENLFCPSLIAFAMGIEL 62		
CY 62 GAKGKACQQCQIORTLKOQETSGAEFFFLVLSFCSAISEKCOBFTFLNANALYLQEGFTYKE 121		
Db 63 GAHGTTKEIHSLGFDLNGEEFTFLKDSMATTEEHYLMANLYVQONGFHYE 122		
Qy 122 QYLHGNEKEFQSAIKUDFOAKACAMISTWERTDGRIKOMFSGEFGPULTRLVYN 181		
Db 123 KFLQLYKRYKADEVNDFOSOAAVATHINKWGEHTNNNIKDFVSSRD-SALTHVLIN 182		
Qy 182 AIFYKGWQKPERKEDTOLINFTKONGSTYKIPMKALLRTKYGYFSESSIN---YQVL 237		
Db 183 AIFYKGWKSQFRPENTRTFSFTKDDETEQIQPMNYQOGEFFYGFSDGSNEAGGIYQVIL 242		
CY 238 ELYYGKGEFLSLTIIPLPGMDLEEVKLITAAQKILKWLSENQEEVEYISLPRFVYEQVXD 297		
Db 243 EIPYEGBISGMIVLSPQEVPVLTPELVZASLINEWANSVVKQKVVEVLPRTFVEQED 302		
Qy 298 FKDVLYSLENITIEFSGCDLSGTSITDSEASITGSEATSTGTHIPVI 357		
Db 303 LKDVLKSGLIGIEVEVERSADLTAMSNDKELYLAKFKAFLFVNNEBGEAAAAGMIAIR 362		
Qy 38.4%; Score 762.5; DB 1; Length 410; Best Local Similarity 39.5%; Pred. No. 2.7e-43; Mismatches 97; Conservative 97; Indels 5; Gaps 2;		
Db 28 EPVDLIOEVLSHKD-NIIFPLGITLVLEMVQLGAKGKACQQCQIORTLKOQETSGAEFF 86		
Qy 28 EWSNTVNVYHLRATEDENLFLPSLSTALAMGTMELGAQGSTKEIRHSMGYESLKSGBEF 87		
Qy 87 LVLRSCSAISERKQBFTFLNANLYVQONGFHYEVSQVTKVREQVLYHGNKEFQSAIKLVDQDAKAC 146		
Db 88 SFVDFESSMSVABEGQVYKMLANSFLVQNGFHFNEEFLOMMKMYVNEVNHYDFSENVAV 147		

GENE STRUCTURE						
MEDLINE=98391008; PubMed=9729122;						
Berger P., Kozlov S.V., Krueger S.R., Sonderreger P.; "Structure of the mouse gene for the serine protease inhibitor neuroserpin (P112)." Gene 214:25-33(1998).						
[4]						
CHARACTERIZATION-						
MEDLINE=1113198; PubMed=9442076;						
Osterwalder T., Cinelli P., Baici A., Pennella A., Krueger S.R., Schrimpf S.P., Mans M., Sonderreger P.; "The axonally secreted serine proteinase inhibitor, neuroserpin, inhibits plasminogen activators and plasmin but not thrombin." J. Biol. Chem. 273:2312-2321(1998).						
[5]						
X-RAY CRYSTALLOGRAPHY (3.06 ANGSTROMS).						
MEDLINE=2141625; PubMed=1157034;						
Briand C., Kozlov S.V., Sonderreger P., Gruetter M.G.; "Crystal structure of neuroserpin: a neuronal serpin involved in a conformational disease." FEBS Lett. 505:18-22(2001).						
-!- FUNCTION: Serine protease inhibitor that inhibits plasminogen activators and plasmin but not thrombin. May be involved in the formation or reorganization of synaptic connections as well as for synaptic plasticity in the adult nervous system. May protect neurons from cell damage by tissue-type plasminogen activator.						
-!- SUBCELLULAR LOCATION: Secreted.						
-!- TISSUE SPECIFICITY: During embryonic development mostly expressed in CNS. In adult expressed in brain and much less in spinal cord, heart, kidney and testis.						
-!- SIMILARITY: Belongs to the serpin family.						
CC						
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CC						
EMBL; AU001700; CA04939_1;						
EMBL; BC006776; AAH06776_1;						
PDB; 1JTO; X-ray; A/B=25.64, C/D=101-361, E/F=367-399.						
MGD; MGI:1194506; Serpin1.						
Inte-Pro; IPR000215; Prot_inh_serpin.						
Pfam; PF00079; Serpin; 1.						
SMART; SM00093; SERPIN; 1.						
PROSITE; PS00284; SERPIN; 1.						
3D-STRUCTURE: Glycoprotein; Serpin; Signal.						
SIGNAL 1 16						
CHAIN 17 410						
SITE 363 363						
CARBODY 157 157						
CARBODY 321 321						
CARBODY 401 401						
CONFLECT 5 5						
HELIX 26 33						
STRAND 34 38						
HELIX 46 48						
HELIX 50 60						
TURN 61 62						
STRAND 105 105						
STRAND 108 115						
HELIX 122 131						
TURN 132 132						
STRAND 136 139						
TURN 141 142						
HELIX 144 158						
TURN 160 161						
TURN 169 171						
TURN 174 175						
STRAND 178 190						
OS Mus musculus (Mouse).						
RESULTS	9					
ID BAC27727						
PRELIMINARY;						
PRT; 410 AA.						
AC BAC27727;						
DT 14-APR-2004 (TREMBLrel. 27, Created)						
DT 14-APR-2004 (TREMBLrel. 27, Last sequence update)						
DT 14-APR-2004 (TREMBLrel. 27, Last annotation update)						
DE Adult male olfactory brain cDNA, RIKEN full-length enriched library,						
DE clone:6430403B13 product:serine (or cysteine) proteinase inhibitor,						
DE clade I (neuroserpin), member 1, full insert sequence.						
OS Mus musculus (Mouse).						

RESULT 14
Q86W04 PRELIMINARY; PRT; 390 AA.
ID Q86W04;
AC NITEIFSGCDLSGITSSSEVYVQTVKFFINEGDSAAATSTGI---HIPVINSLA 361
DT 01-JUN-2003 (TREMBLrel. 24, Created)
DT 01-MAR-2003 (TREMBLrel. 23, Last sequence update)
DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
DE Squamous cell carcinoma antigen 1.
Name=SERPINB3;
GN Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
RN [1]_TaxID=9606;
RN [1]_TaxID=9606;
RN [1]_TaxID=9606;
RP SEQUENCE FROM N.A.
RX MEDLINE=22382588; PubMed=12973381;
RA Moore P.L.; Ong S.; Harrison T.J.;
RT "Binding of HBV to cells is mediated by SCCA1 but does not require the
reactive site loop."
RL J. Biol. Chem. 278:46709-46717(2003).
CC |- SIMILARITY: Belongs to the serpin family.
DR EMBL; AJ515706; CAD65658.1.; -.
DR HSSP; P10108; IATH.
DR GO:0004867; F:serine-type endopeptidase inhibitor activity; IEA.
DR InterPro; IPR000215; Prot_inh_serpin.
DR Pfam; PF00079; Serpin_1.
DR SMART; SM00093; SERPIN_1.
DR PROSITE; PS00284; SERPIN_1.
DR XW Protease inhibitor; Serine protease inhibitor; Serpin.
SQ SEQUENCE 390 AA; 44504 MW; E9056D2D786C9B24 CRC64;

Query Match Score 640; DB 2;
Best Local Similarity 34.9%; Pred. No. 4.8e-35;
Matches 137; Conservative 89; Mismatches 137; Indels 30; Gaps 6;

Qy 23 AQRNTEPAVDLYQEVSLSHKDNITFSPGLITVLENVOLGAKRAQQIRQTIIKQQERTS- 81
Db 5 SEANTXMFEDLFQFRMSKEENIIFTSPISITSALGVNLGAKDNATAQIKKVLIFDQVTE 64
RW Prosite; PS0024; SERPIN_1.
SQ SEQUENCE 390 AA; 44612 MW; A56524CA40CA1C76 CRC64;

Query Match Score 647; DB 2;
Best Local Similarity 35.3%; Pred. No. 1.6e-35;
Matches 137; Conservative 89; Mismatches 142; Indels 20; Gaps 5;

Qy 23 AQRNTEPAVDLYQEVSLSHKDNITFSPGLITVLENVOLGAKRAQQIRQTIIKQQERTS- 81
Db 5 SEANTXMFEDLFQFRMSKEENIIFTSPISITSALGVNLGAKDNATAQIKKVLIFDQVTE 64
Qy 82 -----AGEEFLVKSFCSAISEKKQETTFNLANALYLOEGFTVKEOYLHGNK 128
Db 65 NTGKRAPATYHDSGNVHQQKLITEFNKSTDAYELKIANKLFGKETYLFLQEYDAIK 124
Qy 129 EFPQSAKLVDFQDQA-KACAEMISTWVERKDGIKDMFSGEFFPLTRVLYNAIYFKG 187
Db 125 KFYQTVESVDANAPPESRSRKINNSWESQNNEKLNKLIPEGNTGSNTTLVLYNAIYFKG 184
Qy 188 DWKQKPERKEDTOLINPKRNGSTVTKPMKALLRKYGYSESSSLNYQVLESLYKGDEPS 247
Db 185 RMEKKFKENKEDTKEEKFSNKNTYKSIOMMRQY-TSEFHESLVEDQAKVTEIPYKGKDLS 242
Db 125 KFYQTVESVDANAPPESRSRKINNSWESQNNEKLNKLIPEGNTGSNTTLVLYNAIYFKG 184
Qy 188 DWKQKPERKEDTOLINPKRNGSTVTKPMKALLRKYGYSESSSLNYQVLESLYKGDEPS 247
Db 185 RMEKKFKENKEDTKEEKFSNKNTYKSIOMMRQY-TSEFHESLVEDQAKVTEIPYKGKDLS 242
Db 125 KFYQTVESVDANAPPESRSRKINNSWESQNNEKLNKLIPEGNTGSNTTLVLYNAIYFKG 184
Qy 248 LITLPAEGMDIBEVKLLTAQQLKM-LSEMQEVEVEISLPRPRKEVQXVDFKDVLYSL 305
Db 243 MIVLPNEIDGLQKBEKLAKLMETSLQNMRETRVLHUPRFKVEESYLDKDTLRM 302
Qy 306 NITEIFSGCDLSGITSSSEVYVQTVKFFINEGDSAAATSTGI---HIPVINSLAQS 364
Db 303 GMVDFNGDADGSDGNTGGRGLVLSGVLNKAFTEVTEGAEAAAT---AVAFGSSPT 357
Qy 364 -----QFIANHPFLFIMKGHNPTESILEMGVRVNP 392
Db 358 STNEBFHCNHPFLFIFIRONKTNNSILFYGRFSSP 390

Search completed: October 21, 2004, 06:45:30
Job time : 196 secs

RESULT 15
Q8IXI3 PRELIMINARY; PRT; 390 AA.
ID Q8IXI3;
AC DT 01-MAR-2003 (TREMBLrel. 23, Created)
DT 01-MAR-2003 (TREMBLrel. 23, Last sequence update)
DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
DE Squamous cell carcinoma antigen 1.
Name=SERPINB3;
GN Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
RN [1]_TaxID=9606;
RN [1]_TaxID=9606;
RN [1]_TaxID=9606;
RP SEQUENCE FROM N.A.
RX MEDLINE=22382588; PubMed=12973381;
RA Moore P.L.; Ong S.; Harrison T.J.;
RT "Binding of HBV to cells is mediated by SCCA1 but does not require the
reactive site loop."
RL J. Biol. Chem. 278:46709-46717(2003).
CC |- SIMILARITY: Belongs to the serpin family.
DR EMBL; AJ515706; CAD65658.1.; -.
DR HSSP; P10108; IATH.
DR GO:0004867; F:serine-type endopeptidase inhibitor activity; IEA.
DR InterPro; IPR000215; Prot_inh_serpin.
DR Pfam; PF00079; Serpin_1.
DR SMART; SM00093; SERPIN_1.
DR PROSITE; PS00284; SERPIN_1.
DR XW Protease inhibitor; Serine protease inhibitor; Serpin.
SQ SEQUENCE 390 AA; 44504 MW; E9056D2D786C9B24 CRC64;

Query Match Score 640; DB 2;
Best Local Similarity 34.9%; Pred. No. 4.8e-35;
Matches 137; Conservative 89; Mismatches 137; Indels 30; Gaps 6;

Qy 23 AQRNTEFAVDLYQEVSLSHKDNITFSPGLITVLENVOLGAKRAQQIRQTIIKQQERTS- 81
Db 5 SEANTXMFEDLFQFRMSKEENIIFTSPISITSALGVNLGAKDNATAQIKKVLIFDQVTE 64
Qy 82 -----AGEEFLVKSFCSAISEKKQETTFNLANALYLOEGFTVKEOYLHGNK 128
Db 65 NTGKRAPATYHDSGNVHQQKLITEFNKSTDAYELKIANKLFGKETYLFLQEYDAIK 124
Qy 129 EFPQSAKLVDFQDQA-KACAEMISTWVERKDGIKDMFSGEFFPLTRVLYNAIYFKG 187
Db 125 KFYQTVESVDANAPPESRSRKINNSWESQNNEKLNKLIPEGNTGSNTTLVLYNAIYFKG 184
Qy 188 DWKQKPERKEDTOLINPKRNGSTVTKPMKALLRKYGYSESSSLNYQVLESLYKGDEPS 247
Db 185 RMEKKFKENKEDTKEEKFSNKNTYKSIOMMRQY-TSEFHESLVEDQAKVTEIPYKGKDLS 242
Db 125 KFYQTVESVDANAPPESRSRKINNSWESQNNEKLNKLIPEGNTGSNTTLVLYNAIYFKG 184
Qy 188 DWKQKPERKEDTOLINPKRNGSTVTKPMKALLRKYGYSESSSLNYQVLESLYKGDEPS 247
Db 185 RMEKKFKENKEDTKEEKFSNKNTYKSIOMMRQY-TSEFHESLVEDQAKVTEIPYKGKDLS 242
Db 125 KFYQTVESVDANAPPESRSRKINNSWESQNNEKLNKLIPEGNTGSNTTLVLYNAIYFKG 184
Qy 248 LITLPAEGMDIBEVKLLTAQQLKM-LSEMQEVEVEISLPRPRKEVQXVDFKDVLYSL 305
Db 243 MIVLPNEIDGLQKBEKLAKLMETSLQNMRETRVLHUPRFKVEESYLDKDTLRM 302
Qy 306 NITEIFSGCDLSGITSSSEVYVQTVKFFINEGDSAAATSTGI---HIPVINSLAQS 364
Db 303 GMVDFNGDADGSDGNTGGRGLVLSGVLNKAFTEVTEGAEAAAT---AVAFGSSPT 357
Qy 364 -----QFIANHPFLFIMKGHNPTESILEMGVRVNP 392
Db 358 STNEBFHCNHPFLFIFIRONKTNNSILFYGRFSSP 390



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OM protein - protein search, using sw model

Run on: October 21, 2004, 06:33:26 ; Search time 71 Seconds

(without alignments)

1980.590 Million cell updates/sec

Title: US-10-628-395-2

Perfect score: 1987

Sequence: 1 MDTIPLWSILLFFGQASR.....FIMKHNPIESILEFMGRVTNP 392

Scoring table: BLOSUM62

Gapopen 10.0 , Gapext 0.5

Searched: 2002273 seqs, 35872999 residues

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0
Maximum DB seq length: 2000000000Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_23Seq04:*

1: geneseqP1980s:*

2: geneseqP1990s:*

3: geneseqP2000s:*

4: geneseqP2001s:*

5: geneseqP2002s:*

6: geneseqP2003s:*

7: geneseqP2003bs:*

8: geneseqP2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1987	100.0	392	2 AAW8391	Aaw08384 Novel ser
2	1987	100.0	392	2 AAY04120	Aad23714 Human EST
3	1987	100.0	392	5 AAE14266	Adb39787 Human squ
4	1987	100.0	392	6 ABG12448	Aab9808 SCCA1/SCC
5	1987	100.0	392	8 ADG05045	Aab15241 Psoriasta
6	1987	100.0	405	5 AAE14267	Aab9808 SCCA1/SCC
7	1987	100.0	405	6 ABG12448	Aay2077 Hepatitis
8	1987	100.0	405	8 ADG05056	Aav25928 Human SCC
9	1987	100.0	405	8 ADG05056	Aav72654 Human squ
10	1972	99.2	8 ADQ19298	Aab7854 SCCA1 pro	
11	1968	99.0	405	8 AAY01601	Adi66516 Squamous
12	1823	91.8	406	2 AAW05202	Adi70439 Respirato
13	791.5	39.8	410	2 AAW61054	Adi39782 Human squ
14	791.5	39.8	410	3 AAY31663	Adm1772 Squamous
15	791.5	39.8	410	3 AAY67239	Adm91722 Antilipsoi
16	791.5	39.8	410	3 AAY58172	Adn04442 Antilipos
17	791.5	39.8	410	3 AAB19550	Aay32078 Hepatitis
18	791.5	39.8	410	4 AAU00537	Aar25776 SCC ant
19	791.5	39.8	410	6 ABG78081	Aab98670 SCCA1/SCC
20	791.5	39.8	410	6 ABG56517	Aay25927 Human SCC
22	788.5	39.7	410	7 ADG47609	Adi47609 Human BAI
23	788.5	39.7	410	7 ADF28923	Adf28923 Chicken S
24	757.5	38.1	410	2 AAY47610	Adg47610 Chick n
25	757.5	38.1	410	3 AAY58173	Aay31664 Mouse neu

Aaw08384 Murine ne

Aav58173 The sequence is that of pancreas-derived plasminogen activator inhibitor

ALIGNMENTS

RESULT 1	ID	AAW43391 standard; protein; 392 AA.
XX	AAW43391;	AC
XX	03-AUG-1998	(first entry)
XX	DE	Homo sapiens pancreas-derived plasminogen activator inhibitor.
XX	KW	pancreas-derived; plasminogen activator; inhibitor; PAPAI; diagnosis; treatment; disorder; cancer; blood coagulation; viral infection; pregnancy complications; preclampsia; intrauterine growth retardation; wound healing; tumour invasion; metastasis; leukaemia; lung; breast; endometrial; ovarian; melanoma; gastrointestinal; pancreatic; colorectal; coagulation; thrombi; arterial; venous; inflammation; HIV-1; HIV-2; hepatitis.
XX	OS	Homo sapiens.
XX	FH	Location/Qualifiers
XX	FT	1..14 /note= "Leader sequence"
XX	FT	15..392 /label= mature PAPAI
XX	FT	PN WO980735-A1.
XX	PD	26-FEB-1998.
XX	PD	XX 16-AUG-1996; 96WO-US013283.
XX	PR	XX 16-AUG-1996; 96WO-US013283.
XX	PA	(HUMA) HUMAN GENOME SCI INC.
XX	PI	Ni J, Gentz RL, Ruben SM;
XX	DR	WPI; 1998-169083/15.
XX	DR	N-PSDB; AAV17829.
XX	PT	New isolated pancreas-derived plasminogen activator inhibitor - useful for developing products for diagnosis and treatment of disorders, e.g. cancers, blood coagulation or viral infections.
XX	CC	Claim 16; Fig 1, 88DP; English.

(PAPAI). PAPAI can be used for treating conditions in which abnormal activity of the plasminogen activator (PA) system is implicated e.g. complications of pregnancy such as pre-eclampsia and intrauterine growth retardation, cancer and wound healing. Since plasminogen activator inhibitors (PAI) inhibit tumour cell invasion and metastasis, the products provide a method for treating or preventing tumour invasion and metastasis in cancers including leukaemia, lung cancer, breast cancer, endometrial and ovarian cancer, and melanoma, and gastrointestinal cancers, including pancreatic cancer and colorectal cancer. In addition, since PAI's inhibit fibrinolysis, the products provide a method for treating or preventing coagulation disorders including arterial thrombi, venous thrombi, disseminated intravascular coagulation, and excessive bleeding caused by the administration of a pharmaceutical PA such as urokinase or tissue PA. Further, since PA's are effective antiviral agents, the products provide a method for treating or preventing infections caused by viruses including HIV-, HIV-2 and hepatitis A, B, C, D, E, F or G. The products can also be used for detection and diagnosis of the above disorders.

SQ Sequence 392 AA;

Query Match 100.0%; Score 1987; DB 2; Length 392;

Best Local Similarity 100.0%; Pred. No. 5.8e-170; Mismatches 0; Indels 0; Gaps 0;

Db 1 MDTIFLSSLILFFGQSQRCSAQNTFEAVLYQEVSLSHKDNNIFPSPLGITVLEMVQ 60

Db 1 MDTIFLSSLILFFGQSQRCSAQNTFEAVLYQEVSLSHKDNNIFPSPLGITVLEMVQ 60

Qy 61 LGAKGKAQQQIRQLKQETSAGEBEFLVKLSEKFCSAISEKRCOFTENLNLALYQEGFTVK 120

Db 61 LGAKGKAQQQIRQLKQETSAGEBEFLVKLSEKFCSAISEKRCOFTENLNLALYQEGFTVK 120

Qy 121 EQYLHGNKEFFOSAIKLVDQDAAKACAEIMISTWERTDGKIKDMPSGEFGPLTRVLVY 180

Db 121 EQYLHGNKEFFOSAIKLVDQDAAKACAEIMISTWERTDGKIKDMPSGEFGPLTRVLVY 180

Qy 181 NAYFKGDWKQKPERKDQTLINTFKNGSTVTKIPMKALLTKYGFSESSLNYQVELS 240

Db 181 NAYFKGDWKQKPERKDQTLINTFKNGSTVTKIPMKALLTKYGFSESSLNYQVELS 240

Qy 241 YKDEFSLIILPAGHDIEEVEKLIAQQLKWLSEMOPREVEISLPKPKVQYDFKD 300

Db 241 YKDEFSLIILPAGHDIEEVEKLIAQQLKWLSEMOPREVEISLPKPKVQYDFKD 300

Qy 301 VLYSLNITEIFSGCDLSGIDTOSSEVYVQTQKVFFEINIDGESEATSGIHIPVIMSL 360

Db 301 VLYSLNITEIFSGCDLSGIDTOSSEVYVQTQKVFFEINIDGESEATSGIHIPVIMSL 360

Qy 361 AQSQFIANHPFLPFLMKGAPTESTILMGRVTP 392

Db 361 AQSQFIANHPFLPFLMKGAPTESTILMGRVTP 392

RESULT 2
AY04100 standard; protein; 392 AA.

XX AY04100;

XX DT 14-JUN-1999 (first entry)

DE Pancreas derived plasminogen activator inhibitor protein.

XX KW Pancreas derived plasminogen activator inhibitor; PAPAI; detection;

KW diagnosis; breast cancer; pregnancy; wound healing; coagulation disorder;

KW virus infection.

XX Homo sapiens.

XX Key Peptide 1.14

/label= signal

FT Protein 15..392
PT PT /label= PAPAI

XX W09909161-A1.

PD 25-FEB-1999.

XX PR 18-FEB-1998;

XX PR 15-AUG-1997;

XX PR 197US-00934011.

XX PA (HUMA-) HUMAN GENOME SCI INC.

PA (LONG-) LONG ISLAND JEWISH MEDICAL CENT.

PI Ni J, Gentz RL, Ruben SM, Shi YE;

DR WPI:1999-190161/16.

DR N-PSDB; AAX19885.

XX PT New isolated pancreas-derived plasminogen activator inhibitor - useful for developing products for treating conditions such as complications of pregnancy, cancer, wound healing, coagulation disorders or virus infection.

PT Claim 1; Fig 1; 123pp; English.

PT The present sequence represents an isolated human pancreas-derived plasminogen activator inhibitor (PAPAI). PAPAI proteins inhibit plasminogen activators such as urokinase and tissue plasminogen activator. Products from the present invention can be used for treating conditions in which abnormal activity of the Plasminogen activator system is implicated, e.g. complications of pregnancy such as preeclampsia and intrauterine growth retardation, cancer, inflammation and wound healing. They can also be used for treating, or preventing e.g. tumour invasion and metastasis, coagulation disorders e.g. arterial thrombi, venous thrombi, disseminated intravascular coagulation, and excessive bleeding caused by the administration of a pharmaceutical plasminogen activator, infections caused by viruses e.g. HIV-1, HIV-2, hepatitis A, B, C, E, F or G. The products can also be used for detection and diagnosis.

PT Sequence 392 AA;

PT Query Match 100.0%; Score 1987; DB 2; Length 392;

PT Best Local Similarity 100.0%; Pred. No. 5.8e-170; Mismatches 0; Indels 0; Gaps 0;

PT PS XX

PT CC

CC CC

XX Claim 11; Fig 1A-B; 52pp; English.

XX The invention describes an isolated pancreas-derived plasminogen activator inhibitor (PAPAI). The polynucleotide (II) encoding (I) is useful for diagnosing a disorder involving comparing CC gene expression levels in cells or body fluid of an individual with CC the standard expression level where an increase or decrease in the PAPAI gene expression level of the individual is indicative of the disorder. Since PAPAI regulates fibrinolytic system, substantial alterations in PAPAI activity, serve as markers of tumour invasiveness and metastasis. (II) is useful for predicting whether: a tumour is likely to remain stable, or the invade tissue and ultimately metastasise; a haemorrhage CC likely to occur in patients suffering from hepatic illness such as alcoholic cirrhosis, primary biliary cirrhosis, and liver cancer; a patient is likely to develop pre-eclampsia; and if pre-eclampsia patient is at risk for developing eclampsia. (I) is useful for raising monoclonal antibodies which are useful in diagnostic assays for detecting PAPAI protein expression, and to capture PAPAI protein binding proteins which are also candidate agonist or antagonist. (I) is useful for treating: or inhibiting tumour invasion and metastasis in cancers including e.g., leukaemia, breast cancer, lung cancer; coagulation disorders e.g., arterial thrombi, venous thrombi, excessive bleeding and treating viral infections such as human immunodeficiency virus, hepatitis A, B, C, E or G virus. (I) inhibits plasminogen activator system, and thus is useful for treating disease conditions in which abnormal activity of plasminogen-activator system is implicated, e.g., complications of pregnancy such as pre-eclampsia, wound healing and intrauterine growth retardation. This is the amino acid sequence of a human pancreas-derived plasminogen activator inhibitor XX Sequence 392 AA;

XX DE Human PAPAI protein #1.

XX KW Pancreas-derived plasminogen activator inhibitor; PAPAI; human.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers

XX FT Peptide 1..14 /label= Signal_Peptide

XX FT Protein 15..392 /note= "Human mature PAPAI protein"

XX FT /note= "Human mature PAPAI protein"

XX US2004086978-A1.

XX PD 06-MAY-2004.

XX PR 29-JUL-2003; 2003US-00628395.

XX PR 16-AUG-1996; 96US-0024056P.

XX PR 15-AUG-1997; 97US-00934011.

XX PR 19-FEB-1998; 98US-00026408.

XX PR 12-JUL-2001; 2001US-00902684.

XX PA (NIJU//) NI J.

XX PA (GENT//) GENTZ R. L.

XX PA (RUBE//) RUBEN S. M.

XX PA (SHYY//) SHI Y E.

XX PI Ni J, Gentz RL, Ruben SM, Shi YE;

XX DR WPI: 2004-356204/33.

XX DR N-P5DB; ADO05044.

XX PT Producing an antibody that specifically binds to pancreas-derived plasminogen activator (PAPAI) polypeptide comprises introducing the polypeptide to the animal, and recovering the antibody.

XX PS Claim 1; SEQ ID NO 2; 51pp; English.

XX CC The present invention provides pancreas-derived plasminogen activator inhibitor (PAPAI) polypeptides and their encoding polynucleotides. The invention is useful for producing an antibody that specifically binds to pancreas-derived plasminogen activator inhibitor (PAPAI) polypeptide. The present sequence is human pancreas-derived plasminogen activator inhibitor (PAPAI) protein.

XX SQ Sequence 392 AA;

Query Match	Score	Length	Best Local Similarity	Length	Best Local Similarity	Matches	Score	Length	Best Local Similarity	Length	Best Local Similarity	Matches
Qy 1 MDITFLWSLLPFGSQASRCQAQNTEFQVLYQEVSLSHKDNNTISPLGLTIVLENVQ	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392
Db 1 MDITFLWSLLPFGSQASRCQAQNTEFQVLYQEVSLSHKDNNTISPLGLTIVLENVQ	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392
Qy 61 LGAKGKAQQIROTLLKQETTSAGEEEFLVLSKFCSAISEKQFETNLANLYLQEGFTYK	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392
Db 61 LGAKGKAQQIROTLLKQETTSAGEEEFLVLSKFCSAISEKQFETNLANLYLQEGFTYK	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392
Qy 121 EQYLGNGKEFFQSAIKLVDFQDAKACAEMLISTWERTDGKIDMSEGEFGPLTRLVV	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392
Db 121 EQYLGNGKEFFQSAIKLVDFQDAKACAEMLISTWERTDGKIDMSEGEFGPLTRLVV	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392
Qy 181 NAYPKGDWKQKPRKDQTQINFKNGSTVKIPMKALLRTKYGFSESSLNYQVELS	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392
Db 181 NAYPKGDWKQKPRKDQTQINFKNGSTVKIPMKALLRTKYGFSESSLNYQVELS	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392
Qy 241 YKGDEFSLIILPAEGMDIEEYKLITAQQLKWLSEMQQEEVEISLPFRKEQYDFD	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392
Db 241 YKGDEFSLIILPAEGMDIEEYKLITAQQLKWLSEMQQEEVEISLPFRKEQYDFD	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392
Qy 301 VLYSLNITEIFSGCDLSGIDPSSEVYVSYTQKVFFINEEDGESEATSGIHIPVIMS	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392
Db 301 VLYSLNITEIFSGCDLSGIDPSSEVYVSYTQKVFFINEEDGESEATSGIHIPVIMS	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392
Qy 361 AQSOFIANHPFLIMKINPTESTLFMGRVTNP	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392
Db 361 AQSOFIANHPFLIMKINPTESTLFMGRVTNP	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392	100.0%	392

Qy 181 NAYPKGDWKQKPRKDQTQINFKNGSTVKIPMKALLRTKYGFSESSLNYQVELS

Db 181 NAYPKGDWKQKPRKDQTQINFKNGSTVKIPMKALLRTKYGFSESSLNYQVELS

Qy 241 YKGDEFSLIILPAEGMDIEEYKLITAQQLKWLSEMQQEEVEISLPFRKEQYDFD

Db 241 YKGDEFSLIILPAEGMDIEEYKLITAQQLKWLSEMQQEEVEISLPFRKEQYDFD

Qy 301 VLYSLNITEIFSGCDLSGIDPSSEVYVSYTQKVFFINEEDGESEATSGIHIPVIMS

Db 301 VLYSLNITEIFSGCDLSGIDPSSEVYVSYTQKVFFINEEDGESEATSGIHIPVIMS

Qy 361 AQSOFIANHPFLIMKINPTESTLFMGRVTNP

Db 361 AQSOFIANHPFLIMKINPTESTLFMGRVTNP

RESULT 5

ID ADD05045 standard; protein; 392 AA.

XX AC ADD05045;

XX DT 29-JUL-2004 (first entry)

Qy	301 VLYSLNITEIFSGGCDLSGITDSSEVVYTSQVTKVFFINEDGSBAATTSTGTHIPVMSL 360	Qy	1 MDTIFWSSLFFFQASRCSAQNTETAVDLYQEVSLSHKONIIFSPLGITLVLENQ 60	
Db	301 VLYSLNITEIFSGGCDLSGITDSSEVVYTSQVTKVFFINEDGSBAATTSTGTHIPVMSL 360	Db	1 MDTIFWSSLFFFQASRCSAQNTETAVDLYQEVSLSHKONIIFSPLGITLVLENQ 60	
Qy	361 AQSQFIAHNPFLFMKHPTESLFMGTVNP 392	Qy	61 LGAKGKAQQQTROTQLQOETSAGEFLVRSFCSAISERKQETTFLANALYLOGFTVK 120	
Db	361 AQSQFIAHNPFLFMKHPTESLFMGTVNP 392	Db	61 LGAKGKAQQQTROTQLQOETSAGEFLVRSFCSAISERKQETTFLANALYLOGFTVK 120	
RESULT 6				
AAV04121	standard; protein; 405 AA.	Qy	121 EQYLHGKEFFQSAIKLVDQDAKACAEIMSTWERTDKIKMFGSGBEEFGPLTRLVV 180	
ID		Db	121 EQYLHGKEFFQSAIKLVDQDAKACAEIMSTWERTDKIKMFGSGBEEFGPLTRLVV 180	
XX		Qy	61 NAIYFKGDWFKQFKREDTOLINFTRKGSTKIPMKALLRTKYGYFSESSLNQYLELS 240	
AC		Db	61 NAIYFKGDWFKQFKREDTOLINFTRKGSTKIPMKALLRTKYGYFSESSLNQYLELS 240	
AAV04121;		Qy	181 NAIYFKGDWFKQFKREDTOLINFTRKGSTKIPMKALLRTKYGYFSESSLNQYLELS 240	
XX		Db	181 NAIYFKGDWFKQFKREDTOLINFTRKGSTKIPMKALLRTKYGYFSESSLNQYLELS 240	
DT	14-JUN-1999 (first entry)	Qy	121 EQYLHGKEFFQSAIKLVDQDAKACAEIMSTWERTDKIKMFGSGBEEFGPLTRLVV 180	
XX		Db	121 EQYLHGKEFFQSAIKLVDQDAKACAEIMSTWERTDKIKMFGSGBEEFGPLTRLVV 180	
DE	Pancreas derived plasminogen activator inhibitor protein.	Qy	241 YKGDEFSLITLPAAGMDIEBEVEKLITAQQLKMSMEOEEVVISLPFKVEQKVDFFD 300	
XX		Db	241 YKGDEFSLITLPAAGMDIEBEVEKLITAQQLKMSMEOEEVVISLPFKVEQKVDFFD 300	
KW	Pancreas derived plasminogen activator inhibitor; PAPAI; detection;	Qy	301 VLYSINITEFSGGCDLSGTDSSSVVYQVTKPPEINEDGSEAAATGHIHPVMSL 360	
KW	diagnosis; breast cancer; pregnancy; wound healing; coagulation disorder;	Db	301 VLYSINITEFSGGCDLSGTDSSSVVYQVTKPPEINEDGSEAAATGHIHPVMSL 360	
KW	virus infection.	Qy	361 AQSQFIAHNPFLFMKHPTESLFMGTVNP 392	
XX		Db	361 AQSQFIAHNPFLFMKHPTESLFMGTVNP 392	
OS	Homo sapiens.	RESULT 7		
FH		AAE14267	ID	AAE14267 standard; protein; 405 AA.
FT	Peptide	XX	XX	
FT	1..18	AC	AAE14267;	
FT	/label= signal	XX	XX	
FT	20..405	DB	07-MAR-2002 (first entry)	
FT	/label= PAPAI	XX	XX	
XX	W0909161-A1.	XX	XX	
PN		XX	XX	
XX		XX	XX	
PD	25-FEB-1999.	XX	XX	
XX		XX	XX	
PF	18-FEB-1998; 9BMO-US03217.	XX	XX	
XX		XX	XX	
PR	15-AUG-1997; 97US-00934011.	XX	XX	
XX		XX	XX	
PA	(HUMA-) HUMAN GENOME SCI INC.	XX	XX	
PA	(LONG-) LONG ISLAND JEWISH MEDICAL CENT.	XX	XX	
XX		XX	XX	
NI	J., Gentz RL, Ruben SM, Shi YE;	XX	XX	
XX		XX	XX	
DR	WPI: 1999-190161/16.	XX	XX	
DR	N-PSDB; AAX19886.	XX	XX	
XX		XX	XX	
PT	New isolated Pancreas-derived plasminogen activator inhibitor - useful for developing products for treating conditions such as complications of pregnancy, cancer, wound healing, coagulation disorders or virus infection.	OS	Homo sapiens.	
PT		XX	XX	
PT		Key	Location/Qualifiers	
PT		FT	1..18	
PT		FT	/label= signal_peptide	
PT		FT	19..405	
PT		FT	/note= "Human mature PAPAI"	
XX		XX	XX	
CC	The present sequence represents an isolated human pancreas-derived plasminogen activator inhibitor (PAPAI). PAPAI proteins inhibit plasminogen activators such as urokinase and tissue plasminogen activator. Products from the present invention can be used for treating conditions in which abnormal activity of the plasminogen activator system is implicated e.g. complications of pregnancy such as preeclampsia and intrauterine growth retardation, cancer, inflammation and wound healing. They can also be used for treating or preventing e.g. tumour invasion and metastasis, coagulation disorders e.g. arterial thrombi, venous thrombi, disseminated intravascular coagulation, and excessive bleeding caused by the administration of a pharmaceutical plasminogen activator, infections caused by viruses e.g. HIV-1, hepatitis A, B, C, E, F or G. The products can also be used for detection and diagnosis.	XX	US6303338-B1.	
CC		XX	XX	
CC		PD	16-OCT-2001.	
CC		XX	XX	
CC		PF	19-FEB-1998;	98US-00026408.
CC		XX	XX	16-AUG-1996; 96US-0024056P.
CC		PR	15-AUG-1997;	97US-00934011.
CC		XX	XX	(HUMA-) HUMAN GENOME SCI INC.
CC		PA	XX	XX
CC		PI	Ni J, Gentz RL, Ruben SM, Shi YE;	
CC		XX	XX	
SQ	Sequence 405 AA;	XX	XX	
Query Match	100.0%	Score	1987; DB 2;	Length 405;
Best Local Similarity	100.0%	Prod. No.	6e-170;	Indels 0; Mismatches 0;
Matches	392; Conservative	Gaps	0;	
XX				
XX		DR	WPI: 2002-033216/04.	
XX		DR	N-PSDB; AAD23718.	
XX		PT	Isolated Polynucleotides encoding the pancreas-derived plasminogen activator inhibitor protein are useful to treat physical and	

Qy	121	EQYLGNGKEPPFCSAIKLVDFODAKACAMISTWERKDGIKIDMFSEEEFGPLTRLVIV	180	CC inhibitor (PAPAI) protein.
Db	121	EQYLGNGKEPPFCSAIKLVDFODAKACAMISTWERKDGIKIDMFSEEEFGPLTRLVIV	180	XX Sequence 405 AA;
Qy	181	NAIVFKGDKWQKFERKEDTQLINFYKNGSTVKI PMMKALLRTKYGYFESSINYQVLELS	240	Query Match 100.0%; Score 1987; DB 8; Length 405;
Db	181	NAIVFKGDKWQKFERKEDTQLINFYKNGSTVKI PMMKALLRTKYGYFESSINYQVLELS	240	Best Local Similarity 100.0%; Pred. No. 6e-170; Matches 392; Conservative 0; Mismatches 0; Gaps 0;
Qy	241	YKGDEFSLILIPAGEMDIEEVEKLITIAQOILKWLSENQEEBEYEISLBRFKVEQKVDFKD	300	Qy 1 MDTIFWSSLJLFFGQSARCSAQNTFEAVDLYOBVSLSHKDNNTIFSPLGLITVLEMVQ 60
Db	241	YKGDEFSLILIPAGEMDIEEVEKLITIAQOILKWLSENQEEBEYEISLBRFKVEQKVDFKD	300	Db 1 MDTIFWSSLJLFFGQSARCSAQNTFEAVDLYOBVSLSHKDNNTIFSPLGLITVLEMVQ 60
Qy	301	VLYSINITEIFSGGCDLSGGITDSSEVVYSSQVTKVFFINEDEGSEATAATSTGIHIPPVMSL	360	Qy 61 LGAKGKAQQQIRQTLKQEQTSAGEFLVLSFCSCAISEKQETNLANALYLOGFTVK 120
Db	301	VLYSINITEIFSGGCDLSGGITDSSEVVYSSQVTKVFFINEDEGSEATAATSTGIHIPPVMSL	360	Db 61 LGAKGKAQQQIRQTLKQEQTSAGEFLVLSFCSCAISEKQETNLANALYLOGFTVK 120
Qy	361	AQSQTIANTEFLIMKHNPTESILFMGRVTNP 392		Qy 121 EQYLHENKEFFOSAKLVDFOAKACAMISTWERKDGIKIDMFSEEEFGPLTRLVIV 180
Db	361	AQSQTIANTEFLIMKHNPTESILFMGRVTNP 392		Db 121 EQYLHENKEFFOSAKLVDFOAKACAMISTWERKDGIKIDMFSEEEFGPLTRLVIV 180
Qy				Qy 161 NAIFYFGDWOKKFREKEDTQLINFYKNGSTVKIPMKALLRTKYGYFSEESLNQYLELS 240
Db				Db 161 NAIFYFGDWOKKFREKEDTQLINFYKNGSTVKIPMKALLRTKYGYFSEESLNQYLELS 240
Qy				Qy 241 YKGDEFSLILIPAGEMDIEEVEKLITAQOILKWLSEMQEVEVSLSPRFKVEQKVDFKD 300
Db				Db 241 YKGDEFSLILIPAGEMDIEEVEKLITAQOILKWLSEMQEVEVSLSPRFKVEQKVDFKD 300
DT	29-JUL-2004	(First entry)		Qy 301 VLYSINITEIFSGGCDLSGGITDSSEVVYSSQVTKVFFINEDEGSEATAATSTGIHIPPVMSL 360
XX				Db 301 VLYSINITEIFSGGCDLSGGITDSSEVVYSSQVTKVFFINEDEGSEATAATSTGIHIPPVMSL 360
DE				Qy 361 AQSQTIANTEFLIMKHNPTESILFMGRVTNP 392
KW				Db 361 AQSQTIANTEFLIMKHNPTESILFMGRVTNP 392
OS				
XS				
Key		Location/Qualifiers		RESULT 10
Peptide	1_18			ID ADQ19238 standard: protein; 405 AA.
FT	label= Signal_peptide			XX ADQ19238;
Protein	19 .. 392			AC ADQ19298;
FT	/note= "Human mature PAPAI protein"			XX DR 26-AUG-2004 (first entry)
FT				XX Human soft tissue sarcoma-upregulated protein - SEQ ID 2117.
XX				XX soft tissue sarcoma; cytostatic; gene therapy; vaccine; screening; human.
XX				XX Homo sapiens.
XX				OS WO2004048938-A2.
XX				XX PN 10-JUN-2004.
XX				XX PP 26-NOV-2003; 2003WO-US038193.
PD	06-MAY-2004.			XX PR 26-NOV-2002; 2002US-0429739P.
XX				XX (PROT-) PROTEIN DESIGN LABS INC.
PF	29-JUL-2003; 2003US-00628395.			XX DR 2004-441208/41.
XX				XX Early detection of soft tissue sarcoma comprises determining expression
PR	16-AUG-1996; 96US-0024056P.			PT of a gene in a first soft tissue sample and a normal soft tissue sample
PR	15-AUG-1997; 97US-00934011.			PT and comparing the gene expression, also useful in treating soft tissue
PR	19-FEB-1998; 98US-0026406.			PT sarcoma.
PR	12-JUL-2001; 2001US-00902684.			XX CC Example 2: SEQ ID NO 2117; 210pp; English.
XX				XX PS XX The invention relates to a novel method for detecting soft tissue sarcoma
PA	(NIJU/) NI J.			CC CC
PA	(GENT/) GENTZ R L.			CC CC
PA	(RUBE/) RUBEN S M.			CC CC
PA	(SHIV/) SHI Y E.			CC CC
PI	Ni J, Gentz RL, Ruben SM, Shi YE;			CC CC
XX				CC CC
XX	WPI; 2004-356204/33 .			CC CC
DR	N-PSBB; AD005035.			CC CC
XX				CC CC
Producing an antibody that specifically binds to pancreas-derived				CC CC
plasminogen activator inhibitor (PAPAI) polypeptide comprises introducing				CC CC
the polypeptide to the animal, and recovering the antibody.				CC CC
Disclosure; SEQ ID NO 13; 51pp; English.				CC CC
The present invention provides pancreas-derived plasminogen activator				CC CC
inhibitor (PAPAI) polypeptides and their encoding polynucleotides. The				CC CC
invention is useful for producing an antibody that specifically binds to				CC CC
pancreas-derived plasminogen activator inhibitor (PAPAI) polypeptide. The				CC CC
present sequence is human pancreas-derived plasminogen activator				CC CC

CC which comprises obtaining a first soft tissue sample from an individual
 CC and a normal soft tissue sample from the same or different individual,
 CC determining the expression of a gene in both samples and comparing the
 CC expression of the gene in both soft tissue samples, where a higher level
 CC of protein expression in the first soft tissue sample indicates the
 CC presence of soft tissue sarcoma. The method of the invention has
 CC cytostatic applications and may be useful for detecting soft tissue
 CC sarcoma, possibly via gene therapy or vaccine production. The nucleic
 CC acid sequences may be useful in diagnostic and screening applications.
 CC The current sequence is that of a human soft tissue sarcoma-upregulated
 CC protein of the invention. The current sequence is not shown within the
 CC specification per se but was submitted in CD format by the inventor.

XX Sequence 405 AA;

Query Match 99.2%; Score 1972; DB 8; Length 405;
 Best Local Similarity 99.5%; Pred. No. 1.3e-168; Indels 0; Gaps 0;

Matches 390; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Db 1 MDTIPFLWSLILFFGSOASRCSAQRNTEPAVDLYQEVLSHKDNIIIFSPGLITVLEMVQ 60

Db 1 MDTIPFLWSLILFFGSOASRCSAQRNTEPAVDLYQEVLSHKDNIIIFSPGLITVLEMVQ 60

Qy 61 LGAKRKAQQIRQTLKQQTSAISKEFYLKSFCSAIKSQEFTENANALYQEGFTVK 120

Db 61 LGAKRKAQQIRQTLKQQTSAISKEFYLKSFCSAIKSQEFTENANALYQEGFTVK 120

Qy 121 EQYLGKNEKFOSATKLVDFQDAKACAEIMISTVERKDGIKIDMFSGEFFGPITLVIV 180

Db 121 EQYLGKNEKFOSATKLVDFQDAKACAEIMISTVERKDGIKIDMFSGEFFGPITLVIV 180

Qy 181 NAIYFKGDWQKFRKEDTQLINFTPKNGSTVKIPEMKALLRTKGYSESSINYQVELS 240

Db 181 NAIYFKGDWQKFRKEDTQLINFTPKNGSTVKIPEMKALLRTKGYSESSINYQVELS 240

Qy 241 YKGDEFSLIILPAGMD1BEVERKLITAQQLKWLSENQEVEEYISLSPRKVBQVDFKD 300

Db 241 YKGDEFSLIILPAGMD1BEVERKLITAQQLKWLSENQEVEEYISLSPRKVBQVDFKD 300

Qy 301 VLYSINITETSGGCDLSSGITDSSEVYTSQVTKVFFINEDESEATSTGTHIPVIMSL 360

Db 301 VLYSINITETSGGCDLSSGITDSSEVYTSQVTKVFFINEDESEATSTGTHIPVIMSL 360

Qy 361 AQSFIANPFLFMKHNPTESTISLFMGRVTNP 392

Db 361 AQSFIANPFLFMKHNPTESTISLFMGRVTNP 392

RESULT 11
 ID AAY01601 standard; protein; 405 AA.
 AC AAY01601;
 DT 18-JUN-1999 (first entry)

XX Protein encoded by the human panopin gene.

XX Human panopin gene; serine protease inhibitor; serpin; gene therapy;
 KW cancer treatment; pancreatic cancer; tumour.

XX Homo sapiens.

XX WO911796-A1.

XX PD 11-MAR-1999.

XX PP 28-AUG-1998;

XX PR 01-SEP-1997;

XX PR 10-FEB-1998;

XX PA (SAXA) OTSURA PHARM CO LTD.

XX	Ozaki K., Nagata M., Fujiwara T., Hirano H., Kyushiki H., Okamoto T;	PI	Ozaki K., Nagata M., Fujiwara T., Hirano H., Kyushiki H., Okamoto T;
CC	PI	PI	PI
CC	Niimi M;		
CC	WPI; 1999-205189/17.		
CC	DR		
CC	N-PSDB; AAX26705.		
XX	Drug compositions, useful for, e.g. Gene therapy with efficacious		
PT	PT treatment of pancreatic cancer and inhibition of its metastasis.		
XX	XX		
PS	PS Claim 1; Page 98-100; 112pp; Japanese.		
XX	XX		
CC	The present sequence is encoded by a human panopin gene. The panopin gene encodes a protein homologous to the serine protease inhibitor of serpin.		
CC	The products may be used for gene therapy, e.g. in treatment of cancers.		
CC	The Panopin gene can be formulated into a drug composition for gene therapy of pancreatic cancer/tumour and for inhibition of its metastasis to suppress further malignant transformation and proliferation. Such genes can also be applied in clarifying, diagnosing, preventing and treating pancreatic cancer and its metastasis		
XX	XX		
SQ	Sequence 405 AA;		
	Query Match 99.0%; Score 1968; DB 2;	Length 405;	
	Best Local Similarity 90.2%;	Pred. No. 3.1e-168;	
	Matches 389; Conservative 1;	Mismatches 2;	
	Indels 0;	Gaps 0;	
	Db 1 MDTIPFLWSLILFFGSOASRCSAQRNTEPAVDLYQEVLSHKDNIIIFSPGLITVLEMVQ 60	Qy 1 MDTIPFLWSLILFFGSOASRCSAQRNTEPAVDLYQEVLSHKDNIIIFSPGLITVLEMVQ 60	
	Db 1 MDTIPFLWSLILFFGSOASRCSAQRNTEPAVDLYQEVLSHKDNIIIFSPGLITVLEMVQ 60	Db 1 MDTIPFLWSLILFFGSOASRCSAQRNTEPAVDLYQEVLSHKDNIIIFSPGLITVLEMVQ 60	
	Qy 61 LGAKRKAQQIRQTLKQQTSAISKEFYLKSFCSAIKSQEFTENANALYQEGFTVK 120	Qy 61 LGAKRKAQQIRQTLKQQTSAISKEFYLKSFCSAIKSQEFTENANALYQEGFTVK 120	
	Db 61 LGAKRKAQQIRQTLKQQTSAISKEFYLKSFCSAIKSQEFTENANALYQEGFTVK 120	Db 61 LGAKRKAQQIRQTLKQQTSAISKEFYLKSFCSAIKSQEFTENANALYQEGFTVK 120	
	Qy 121 EQYLGKNEKFOSATKLVDFQDAKACAEIMISTVERKDGIKIDMFSGEFFGPITLVIV 180	Qy 121 EQYLGKNEKFOSATKLVDFQDAKACAEIMISTVERKDGIKIDMFSGEFFGPITLVIV 180	
	Db 121 EQYLGKNEKFOSATKLVDFQDAKACAEIMISTVERKDGIKIDMFSGEFFGPITLVIV 180	Db 121 EQYLGKNEKFOSATKLVDFQDAKACAEIMISTVERKDGIKIDMFSGEFFGPITLVIV 180	
	Qy 181 NAIYFKGDWQKFRKEDTQLINFTPKNGSTVKIPEMKALLRTKGYSESSINYQVELS 240	Qy 181 NAIYFKGDWQKFRKEDTQLINFTPKNGSTVKIPEMKALLRTKGYSESSINYQVELS 240	
	Db 181 NAIYFKGDWQKFRKEDTQLINFTPKNGSTVKIPEMKALLRTKGYSESSINYQVELS 240	Db 181 NAIYFKGDWQKFRKEDTQLINFTPKNGSTVKIPEMKALLRTKGYSESSINYQVELS 240	
	Qy 241 YKGDEFSLIILPAGMD1BEVERKLITAQQLKWLSENQEVEEYISLSPRKVBQVDFKD 300	Qy 241 YKGDEFSLIILPAGMD1BEVERKLITAQQLKWLSENQEVEEYISLSPRKVBQVDFKD 300	
	Db 241 YKGDEFSLIILPAGMD1BEVERKLITAQQLKWLSENQEVEEYISLSPRKVBQVDFKD 300	Db 241 YKGDEFSLIILPAGMD1BEVERKLITAQQLKWLSENQEVEEYISLSPRKVBQVDFKD 300	
	Qy 301 VLYSINITETSGGCDLSSGITDSSEVYTSQVTKVFFINEDESEATSTGTHIPVIMSL 360	Qy 301 VLYSINITETSGGCDLSSGITDSSEVYTSQVTKVFFINEDESEATSTGTHIPVIMSL 360	
	Db 301 VLYSINITETSGGCDLSSGITDSSEVYTSQVTKVFFINEDESEATSTGTHIPVIMSL 360	Db 301 VLYSINITETSGGCDLSSGITDSSEVYTSQVTKVFFINEDESEATSTGTHIPVIMSL 360	
	Qy 361 AQSFIANPFLFMKHNPTESTISLFMGRVTNP 392	Qy 361 AQSFIANPFLFMKHNPTESTISLFMGRVTNP 392	
	Db 361 AQSFIANPFLFMKHNPTESTISLFMGRVTNP 392	Db 361 AQSFIANPFLFMKHNPTESTISLFMGRVTNP 392	
	XX RESULT 12		
	AAW0602		
	ID AAW06202 standard; protein; 406 AA.		
	XX		
	AC AAW06202;		
	AC AAW06202;		
	XX		
	DT 12-FEB-1997 (first entry)		
	XX		
	DB Human pancreas-derived serpin.		
	XX		
	Pancreas-derived serpin; PDS; serine protease inhibitor; pancreatitis;		
	KW inflammation; antiinflammatory; diagnosis; therapy.		
	XX		
	OS Homo sapiens.		
	XX		
	PN WO9634957-A1.		
	XX		
	PD 11-MAR-1999.		
	XX		
	PP 28-AUG-1998;		
	XX		
	PR 01-SEP-1997;		
	PR 10-FEB-1998;		
	XX		
	PA (SAXA) OTSURA PHARM CO LTD.		
	XX		
	PN WO9634957-A1.		

PD 07-NOV-1996.
 XX
 PF 01-MAY-1996; 96WO-US006137.
 XX
 PR 02-MAY-1995; 95US-004348B1.
 XX
 PA (INCYT) INCYTE PHARM INC.
 XX
 PI Braxton SM, Wilde CG, Diep D;
 DR WPI: 1996-518311/51.
 N-PSDB; AAT42978.
 XX
 PT DNA encoding pancreas derived serpin - useful in diagnosis and treatment of pancreatic inflammation and disease.
 XX
 PS Claim 1; Page 24-26; 36pp; English.
 XX
 CC Human pancreas-derived serpin (PDS) (AAW06202) is a novel serine protease inhibitor that is expressed specifically in the pancreas. It is the product of a cDNA clone (AAT2978) cloned from a human pancreas library.
 CC Recombinant PDS can be produced in transformed host cells. The host cells or isolated PDS can be used to screen for cpds. that modulate PDS activity. PDS can be used as a specific protease inhibitor to treat viral infections, endotoxin or exotoxin poisoning, ischaemia, anoxia, direct trauma and other physiological or pathological conditions of the pancreas.
 CC
 XX
 Sequence 406 AA;

Query Match	91.8%	Score 1823.5;	DB 2;	Length 406;
Best Local Similarity	92.4%	Pred. No. 3.1e-155;		
Matches	366;	Conservative	9;	Mismatches 14;
			Indels	7;
			Gaps	2;

XX

QY 1 MDTFLWSSLILLFFSQASRCSAQKNTPEAVDLYOEVSLSHKUNLIFPLGLTIVLEMVQ 60
 Db 1 MDTFWVSSLILLFFSQASRCSAQKNTPEAVDLYOEVSLSHKUNLIFPLGLTIVLEMVQ 60
 QY 61 LGAKGKAQQIQRQLIKQOETSAGREFLVLSFCSAISEKKOETENANALYL---QEG 116
 Db 61 LGAKGKAQQIQRQLIKQOETSAGREFLVLSFCSAISEKKOETENANALYL---QEG 116
 QY 117 FTVKEQYLHNEKKEFFQSAIKLVQDQAKACAEIMSTWVERKTQDGKIKMFSGEFGPITR 176
 Db 118 FTVKEQYLHNEKKEFFQSAIKLVQDQAKACAGMISTWVERKTQDGKIKMFSGEFGPITR 177
 QY 177 LVLYNAYFQGDWKQKRKDQLINFPTKNGSTVKPMKALIRTYGYFSSSLNYQV 236
 Db 178 LVLYNAYFQGDWKQKRKDQLINFPTKNGSTVKPMKALIRTYGYFSSSLNYQV 237
 QY 237 LEISYKGDESLILPAEGMDIREVEKLITAQOILKWLSEMOEEVEISLPFKVFCRV 296
 Db 238 LEISYKGDESLILPAEGMDIREVEKLITAQOILKWLSEMOEEVEISLPFKVFCRV 297
 QY 297 DFKDVLYSINITEIFSGGGDLSGITDSESVYVSQYTKUFFINEDGSEATASTGTHIPV 356
 Db 298 DFKDVLYSINITEIFSGGGDLSGITDSESVYVSQYTKUFFINEDGSEATASTGTHIPV 357
 QY 357 IMSLAQSQFANHPFLIMKHNPEESILEMGRVTP 392
 Db 358 IMSLAQSQFANHPFLIMKHNPEESILEMGRVTP 393

SQ

XX

Query Match 39.8%; Score 791.5; DB 2; Length 410;
 Best Local Similarity 39.5%; Pred. No. 2.3e-62;
 Matches 155; Conservative 97; Mismatches 135; Indels 5; Gaps 2;

QY 6 LWSLLLFQFGSQASRCSAQKNTPEAVDLYOEVSLSHK-D-NIIFSPLGITLVLEMVQLGAK 64
 AC :|||:|||:|||:
 XX 6 LFSLLVQSMATGATPPEEAIDLSYNMRRLRATEDENILFSSLSIALAMGMELGQ 65
 DT 21-AUG-1998 (First entry)
 XX Brain-associated inhibitor of tissue plasminogen activator (BAIT).
 DE

RESULT 13
 AAW0054 standard; protein; 410 AA.
 ID AAW0054
 XX
 AC AAW0054;
 XX
 DT 21-AUG-1998
 XX

DDB	66	GSTQEIRHSMGYDLSKNGGEFSFLKEFSMMVTAKEQYVMKIANSLFVQNGFHNEEFL	125	CC infarction and ischaemia, intracerebral haemorrhage and subarachnoid haemorrhage, by exerting a protecting effect; to prevent cell death of cells of the nervous system (claimed); to treat tissue damage in traumatic brain injury; to treat neurodegenerative or neuroinflammatory diseases such as multiple sclerosis; to reduce the effects of epilepsies on brain tissue; to rescue endangered neurons e.g. in epileptic seizures and cancerous neformations; for axonal regeneration and/or restoration of synaptic integrity and function; to prevent or cure retinal degeneration or neangiogenesis; to regenerate injured, damaged, underdeveloped or maldeveloped brain tissue and/or nervous tissue; to treat pain; to treat psychiatric disorders such as schizophrenia; to treat tumors, including the prevention or reduction of the growth, expansion, infiltration and metastasis of primary and metastatic tumors, especially brain tumors or tumors of the retina (claimed); and to ameliorate learning and memory functions. Neuroserpin proteins and DNA can also be used for the screening of drugs against neuroserpin involving disorders, to produce antigens and hence raise antibodies, and in the creation of transgenic animals		
DDB	125	HENKEFFQSAIKLKVDFQDAKACAEIMSTWVERKTGDRIKDNMSEGGFGPLTRVLVNAIY	184	CC	XX	
DDB	126	QMKRKYNAVNHNVDFSQNVANYINWKVENNTNNLKVQDVSPrDAAAYLALINAVY	185	CC	XX	
DDB	185	FKGDWKQFKRKDQLNFTKNGSTVKIPMKALLRTKGYFSSESLN---YQVTELS	240	CC	XX	
DDB	186	PKENWKWSQRPENTRTEFSKDESEVQIPGFSQDSNEAGGIYQVEIP	245	CC	XX	
DDB	241	YKQDEFSLFLPAEGMDIEVERKLITAQQLKWLSEMQEEVEBISPLRQVDFKD	300	CC	XX	
DDB	246	YEGDEISMMLVLRSRQEYPLATEPLVKAQLVWEWAANSVKQKVEVLPRTVEQEDLKD	305	CC	XX	
DDB	301	VLYSLNLTIEFSGCDLSGITSSEVYVSQTKVFFENINEDGEAATSTGHIHIPVIMS	360	CC	XX	
DDB	306	VLKALGITEFIKDANLIGLSDNKEFLSKRAITHKSFILENEEGSEAAVSGMAISRMAY	365	CC	XX	
DDB	361	AQSQFIANHPELFIMKINPNTESTLFLMERYTNP	392	CC	XX	
DDB	366	LTPQVIVDHPPFLIRNRRTGTLFLMGRVMEHP	397	CC	XX	
DDB	2Y	Sequence 410 AA;		SQ		
DDB	2Y	Query Match 39.8%; Score 791.5; DB 2; Length 410;		SQ		
DDB	2Y	Best Local Similarity 39.5%; Pred. No. 2.3e-62; Mismatches 135; Indels 5; Gaps 2;		SQ		
DDB	2Y	Matches 155; Conservative 97; Mismatches 135; Indels 5; Gaps 2;		SQ		
DDB	2Y	6 LWSLLLFFGQASRCASQAKNTTEFADYLQEVESLHKD-NIIFSPGLITIVLEMVQGAK 64		Qy		
DDB	2Y	6 LFSLLVLQSMATGATPFPEAAIDSVMMYNRLEATGEDENILPSPLSPLALAMNMMEGAQ 65		Db		
DDB	2Y	65 GKAQQQIQTQLKQDTSAGEEFFLVLSKFCPSAISEKKQEPPTFNIANALVQLEGTVKBQVYL 124		Qy		
DDB	2Y	66 GSTQKEIRISMGYDSDLKNGGEFSPLKEISNNMTAKESQYVMKIANSLFVQNGHYNVEEFL 125		Db		
DDB	2Y	125 HGNKEFQSAIKLVDQDAAKACEMISTWVERKDQIKDMFSGEEFGBPLTRVLVNAIY 184		Qy		
DDB	2Y	126 QMKKYYFNAVNHYDSONAVANYINTKVNENTNNLKVDSLPRDFDAATYLALINAVY 185		Db		
DDB	2Y	185 FKGDWKQFKRKDOLINFTKNGSTVKIPMKALLRTKGYFSSESLN---YQVTELS 240		Qy		
DDB	2Y	186 FKGDWKQSQRPENTRTEFSKDESEVQIPGMVYQQGGEFYGEFSQDGSEAGGIYQVEIP		Db		
DDB	2Y	241 YKGDEFSLFLIILPREGMDIEEVKLTIQQIQLKWLSEMQEEVEISLSPREKFQKVDFKD 300		Qy		
DDB	2Y	246 YEGDBISMMVLVSRQEYPLATEPLVKAQLVQEVEMVSYKQKVEVYLPRFTVEQEDLKD 305		Db		
DDB	2Y	301 VLYSLNLTIEFSGCDLSITDSSEVYVSQTKVFFENEDGEAATSTGHIIPVIMSL 360		Qy		
DDB	2Y	306 VLKALGITEFIKDANLIGLSDNKEFLSKRAITHKSFILENEEGSEAAVSGMAISRMAY 365		Db		
DDB	2Y	RESULT 15				
DDB	2Y	AAV67239 standard; protein; 410 AA.		ID		
DDB	2Y	AAV67239		AC		
DDB	2Y	XX		DT		
DDB	2Y	XX		DE		
DDB	2Y	XX		DE		
DDB	2Y	XX		KW		
DDB	2Y	XX		KW		
DDB	2Y	XX		PH		
DDB	2Y	XX		PT		
DDB	2Y	XX		Key Peptide		
DDB	2Y	XX		Location/Qualifiers		
DDB	2Y	XX		1..16		
DDB	2Y	XX		/note= "signal peptide"		
DDB	2Y	XX		17..410		
DDB	2Y	XX		/note= "mature protein"		
DDB	2Y	XX		327..360		
DDB	2Y	XX		/note= "reactive site loop"		
DDB	2Y	XX		W09941381-A1.		
DDB	2Y	XX		19-AUG-1999.		
DDB	2Y	XX		12-FEB-1999;		
DDB	2Y	XX		99WO-1B000248.		
DDB	2Y	XX		13-FEB-1998;		
DDB	2Y	XX		98US-00023129.		
DDB	2Y	XX		(SOND) SONDEREGGER P.		
DDB	2Y	XX		Sonderegger P, Schrimpf SP, Krueger SR, Osterwalder T;		
DDB	2Y	XX		Stoeckli ET;		
DDB	2Y	XX		WPI: 199-518451/43.		
DDB	2Y	XX		N-PSDB, AX87830.		
DDB	2Y	XX		Claim 3; Page 3-5; 55pp; English.		
DDB	2Y	XX		Novel neuroserpins useful for treating central nervous system disorders or brain or retinal tumors.		
DDB	2Y	XX		The present sequence represents human neuroserpin, as deduced from cDNA (see AAX87830) isolated from human foetal brain and foetal retina cDNA libraries. Neuroserpins can be used in the treatment of disorders of the central nervous system, especially disorders of a protease such as a tissue-type or urokinase-type plasminogen activator (claimed) to minimise tissue destruction in stroke (claimed) including brain		
DDB	2Y	XX		infarction and ischaemia, intracerebral haemorrhage and subarachnoid haemorrhage, by exerting a protecting effect; to prevent cell death of cells of the nervous system (claimed); to treat tissue damage in traumatic brain injury; to treat neurodegenerative or neuroinflammatory diseases such as multiple sclerosis; to reduce the effects of epilepsies on brain tissue; to rescue endangered neurons e.g. in epileptic seizures and cancerous neformations; for axonal regeneration and/or restoration of synaptic integrity and function; to prevent or cure retinal degeneration or neangiogenesis; to regenerate injured, damaged, underdeveloped or maldeveloped brain tissue and/or nervous tissue; to treat pain; to treat psychiatric disorders such as schizophrenia; to treat tumors, including the prevention or reduction of the growth, expansion, infiltration and metastasis of primary and metastatic tumors, especially brain tumors or tumors of the retina (claimed); and to ameliorate learning and memory functions. Neuroserpin proteins and DNA can also be used for the screening of drugs against neuroserpin involving disorders, to produce antigens and hence raise antibodies, and in the creation of transgenic animals		
DDB	2Y	XX		Location/Qualifiers		
DDB	2Y	XX		1..18		
DDB	2Y	XX		.label= signal peptide		

FT Protein	19 . .410	Db	306 VLKALGITEIPIKDANLTGLSDNKEIFSKAIHKSSFLEVNEEGSEAASGMIAISRMAV 365
FT /label= BAIT		Qy	361 AQSQFIANHPPLFIMKHNPTEISILFYGRYTNP 392
XX US6008020-A.		Db	366 LYPQVIVDHPEFFLKRRTGTLPGRVNHP 397
XX 28-DEC-1999.			
XX 10-OCT-1997; 97US-00948997.			
XX 11-OCT-1996; 96US-0026117F.			
XX (HUNA-) HUMAN GENOME SCI.			
PA (ANVA-) AMERICAN NAT RED CROSS.			
XX Lawrence DA, Dillon PJ, Hastings GA, Coleman TA;			
XX DR WPI: 2000-C96374/08.			
XX N-PSDB; AAZ56164.			
XX New nucleic acid encoding human brain-associated inhibitor of tissue-type plasminogen activator, useful in the diagnosis of various nervous system-related disorders in mammals.			
XX PS Claim 1; Fig 1; 48pp; English.			
XX This is the human brain-associated inhibitor of tissue-type plasminogen activator (BAIT) amino acid sequence. BAIT is a member of the serine protease inhibitor (serpin) family of proteins, and is widely distributed throughout the brain, but is primarily located in the neurons. A recombinant vector containing the BAIT nucleotide sequence can be used to produce a host cell that produces BAIT polypeptide. The BAIT protein selectively inhibits tissue-type plasminogen activator. The BAIT polypeptides and polypeptides are useful in the diagnosis of various nervous system related disorders in mammals which include impaired processes of learning and memory. The impaired spatial, olfactory and taste aversion learning, learning and memory impairments associated with Alzheimer's disease can be diagnosed using the BAIT sequences. BAIT polypeptides and agonists are used for treating an individual in need of an increased level of BAIT activity. BAIT agonists are also useful for treating Alzheimer's disease and peripheral neuropathies such as multiple sclerosis. Motor neuron or sensory neuron damage resulting from spinal cord injury may also be prevented or treated with BAIT agonists. BAIT antagonists can be used for treating an individual in need of a decreased level of BAIT activity.			
XX Sequence 410 AA;			
Qy Query Match 39.8%; Score 791.5; DB 3; Length 410;			
Qy Best Local Similarity 39.5%; Pred. No. 2.3e-62;			
Qy Matches 155; Conservative 97; Mismatches 135; Indels 5; Gaps 2;			
Qy 6 IWSLLLFFGSQASRCSAQXNTPEAVDLYCQBVSLSHD-NIIFSPLGLITVLEMVQICAK 64			
Db 6 LFSLLVLQSMATGAPPEAAIADSVNMVNRLRATEDDNILSPSLLALAMGMMEAQ 65			
Qy 65 GKAQQQIRQLKQQTSAAGREFLVLSKFCSAISRKKCETENFANALYLQEGETVKECYL 124			
Db 66 GSTQKBRHSNGYDSLNGEBFSFLIKEFSMVTAKESQYVMIANSLFLVQNGFHVNNEFL 125			
Qy 125 HGNCIEFPQSAIKLVDQDAAKACMISTVERTDGKIKDMFGEEFPBLTRLVNNIY 184			
Db 126 QMMKXYFNAAVNHDFDSQNTAVANTYKVNENNTNLNKLDSLSPRDFAATYLALINAYY 185			
Qy 185 FKGDWKQKFRKEDTQLINFKRGNSSTKIPMMKALLRKYGYSESSIN---YQVLELS 240			
Db 186 FKGWVKSQFPENTRTSFKIDDEEVQFMMYQGEFFYGFEDGSMEAGGYQVLFIP 245			
Qy 241 YKGDEFSLTILPAEGMDIBEVEKLTIAQCLKLSEMEEBISLPRFKVEQKVDFKD 300			
Db 246 YEGDEISMMVLRSQEVPLATEPLVKAQVLEEVANSKKQRYEVILFRFTVEQIDIKD 305			
Qy 301 VLYSINTTEFSGGGDLSGITDSSVIVYSDVYTSVTCVFFFEDGSEAAATSTGIIHPVMSL 360			



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OM: protein - protein search, using sw model

Run on: October 21, 2004, 06:45:37 ; Search time 131 Seconds
 (without alignments)
 968.804 Million cell updates/sec

Title: US-10-628-395-2

Perfect score: 1987

Sequence: 1 MDRFLWNLILPFQSQASR.....FIMKHNPTEISLEMGRTVTPN 3 92

Scoring table: BLCSTM62

Gapext 0.5

Searched: 1364641 seqs, 323758627 residues

Total number of hits satisfying chosen parameters: 1364641

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Maximum Match 0 %
 Maximum Match 100 %
 Listing first 45 summaries

Published Applications AA: *
 1: /cgns2_E/ptcdatal1/pdbaa/us007_pubcomb.pep: *

Database : Sequence 31, APP1
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 Sequence 62, APP1

סימן 2

RESULT 1
US-09-902-684-2
; Sequence 2, Application US/09902684
; Patent No. US2012/1640A1
; GENERAL INFORMATION:
; APPLICANT: Ni et al.
; TITLE OF INVENTION: PANCREAS DERIVED PLASMINOGEN ACTIVATOR
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SPERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
; STREET: 1100 NEW YORK AVENUE, SUITE 600
; CITY: WASHINGTON

No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, derived by analysis of the total score distribution.

סודות מרים

Result No.	Score	Query Match	Length	DB ID	Description	
					%	Sequence
1	1987	100.0	392	9	US-09-902-684-2	Sequence 2, Appli
2	1987	100.0	392	15	US-09-002-684-2	Sequence 2, Appli
3	1987	100.0	405	9	US-09-902-684-13	Sequence 13, Appli
4	1987	100.0	405	15	US-10-623-395-13	Sequence 13, Appli
5	791.5	39.8	410	9	US-09-0957-485-2	Sequence 2, Appli
6	791.5	39.8	410	9	US-09-0987-021-2	Sequence 2, Appli
7	791.5	39.8	410	15	US-10-355-208-2	Sequence 2, Appli
8	791.5	39.8	410	17	US-10-752-041-2	Sequence 2, Appli
9	788.5	39.7	410	9	US-09-957-485-3	Sequence 3, Appli
10	788.5	39.7	410	9	US-09-987-021-3	Sequence 3, Appli
11	788.5	39.7	410	15	US-10-355-208-3	Sequence 3, Appli
12	788.5	39.7	410	17	US-10-752-041-3	Sequence 3, Appli
13	706	35.5	366	14	US-10-033-634-88	Sequence 88, Appli
14	706	35.5	366	15	US-10-077-411-67	Sequence 67, Appli

INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 392 amino acids
 TYPE: amino acid
 TOPOLOGY: Linear
 MOLECULE TYPE: Protein
 SEQUENCE DESCRIPTION: SEQ ID NO: 2:
 US-09-902-684-2

Query Match 100.0% Score 1987; DB 9; Length 392;
 Best Local Similarity 100.0% Pred. No. 6.5e-156; Indels 0; Gaps 0;
 Matches 392; Conservative 0; Mismatches 0; Deletions 0; Gaps 0;

Qy 1 MDTIFLWSLLFFGSQARCSAQNTKQEFADLYQEVSLSHKDNIIFSPGLTIVLEMVQ 60
 Db 1 MDTIFLWSLLFFGSQARCSAQNTKQEFADLYQEVSLSHKDNIIFSPGLTIVLEMVQ 60

Qy 61 LGAKGKAQQIQRQLKQQTSAEGLVLSFCSAISEKQKFTENALANLYQEGFTVK 120
 Db 61 LGAKGKAQQIQRQLKQQTSAEGLVLSFCSAISEKQKFTENALANLYQEGFTVK 120

Qy 121 EQYLGHNKEFFQSIAKLVDQDAKACAMISWVERTDGKIKDMSGEEGSPLRLV 180
 Db 121 EQYLGHNKEFFQSIAKLVDQDAKACAMISWVERTDGKIKDMSGEEGSPLRLV 180

Qy 181 NAIYFKGDWKQKERKEDTOLINTKNGSTVKIPMMKALLRTKYGFSSESSINYQVELS 240
 Db 181 NAIYFKGDWKQKERKEDTOLINTKNGSTVKIPMMKALLRTKYGFSSESSINYQVELS 240

Qy 241 YKGDBFSLIITLPAGMDIEEVKLTAQQLKWLSEMQEEVEISLPRFKEQKVDFKD 300
 Db 241 YKGDBFSLIITLPAGMDIEEVKLTAQQLKWLSEMQEEVEISLPRFKEQKVDFKD 300

Qy 301 VLYSLNITIFSGCDLSGTSDESVYYSQTKVFEINEDGESEATSTGHIPVIMSL 360
 Db 301 VLYSLNITIFSGCDLSGTSDESVYYSQTKVFEINEDGESEATSTGHIPVIMSL 360

Qy 361 AQSQFIANHPFLMKGKNTESTLFGMGRVNP 392
 Db 361 AQSQFIANHPFLMKGKNTESTLFGMGRVNP 392

RESULT 2
 US-10-628-395-2
 Sequence 2, Application US/10628395
 Publication No. US20040086978A1
 GENERAL INFORMATION:
 APPLICANT: Ni et al.
 TITLE OF INVENTION: PANCREAS-DERIVED PLASMINOGEN ACTIVATOR

NUMBER OF SEQUENCES: 15
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: STERN, KESSLER, GOLDSTEIN & FOX P.L.L.C.
 STREET: 1100 NEW YORK AVENUE, SUITE 600
 CITY: WASHINGTON
 STATE: DC
 ZIP: 20005-3934
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/10/628,395
 FILING DATE: 29-JUL-2003
 CLASSIFICATION: <Unknown>
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US/09/026,408
 FILING DATE: 19-FEB-2001
 APPLICATION NUMBER: US 08/934,011
 FILING DATE: 15-AUG-1997
 APPLICATION NUMBER: US 60/024,055

INFORMATION FOR SEQ ID NO: 3:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 392 amino acids
 TYPE: amino acid
 TOPOLOGY: Linear
 MOLECULE TYPE: protein
 LENGTH: 392 amino acids
 TOPOGY: Linear
 SEQUENCE DESCRIPTION: SEQ ID NO: 3:
 US-10-628-395-2

Query Match 100.0% Score 1987; DB 15; Length 392;
 Best Local Similarity 100.0% Pred. No. 6.5e-156; Indels 0; Gaps 0;
 Matches 392; Conservative 0; Mismatches 0; Deletions 0; Gaps 0;

Qy 1 MDTIFLWSLLFFGSQARCSAQNTKQEFADLYQEVSLSHKDNIIFSPGLTIVLEMVQ 60
 Db 1 MDTIFLWSLLFFGSQARCSAQNTKQEFADLYQEVSLSHKDNIIFSPGLTIVLEMVQ 60

Qy 61 LGAKGKAQQIQRQLKQQTSAEGLVLSFCSAISEKQKFTENALANLYQEGFTVK 120
 Db 61 LGAKGKAQQIQRQLKQQTSAEGLVLSFCSAISEKQKFTENALANLYQEGFTVK 120

Qy 121 EQYLGHNKEFFQSIAKLVDQDAKACAMISWVERTDGKIKDMSGEEGSPLRLV 180
 Db 121 EQYLGHNKEFFQSIAKLVDQDAKACAMISWVERTDGKIKDMSGEEGSPLRLV 180

Qy 181 NAIYFKGDWKQKERKEDTOLINTKNGSTVKIPMMKALLRTKYGFSSESSINYQVELS 240
 Db 181 NAIYFKGDWKQKERKEDTOLINTKNGSTVKIPMMKALLRTKYGFSSESSINYQVELS 240

Qy 241 YKGDBFSLIITLPAGMDIEEVKLTAQQLKWLSEMQEEVEISLPRFKEQKVDFKD 300
 Db 241 YKGDBFSLIITLPAGMDIEEVKLTAQQLKWLSEMQEEVEISLPRFKEQKVDFKD 300

Qy 301 VLYSLNITIFSGCDLSGTSDESVYYSQTKVFEINEDGESEATSTGHIPVIMSL 360
 Db 301 VLYSLNITIFSGCDLSGTSDESVYYSQTKVFEINEDGESEATSTGHIPVIMSL 360

RESULT 3
 US-09-902-684-13
 Sequence 13, Application US/09902684
 Patent No. US20020127740A1
 GENERAL INFORMATION:
 APPLICANT: Ni et al.
 TITLE OF INVENTION: PANCREAS-DERIVED PLASMINOGEN ACTIVATOR
 NUMBER OF SEQUENCES: 15
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: STERN, KESSLER, GOLDSTEIN & FOX P.L.L.C.
 STREET: 1100 NEW YORK AVENUE, SUITE 600
 CITY: WASHINGTON
 STATE: DC
 ZIP: 20005-3934
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/10/628,395
 FILING DATE: 29-JUL-2003
 CLASSIFICATION: <Unknown>
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US/09/026,408
 FILING DATE: 19-FEB-2001
 APPLICATION NUMBER: US 08/934,011
 FILING DATE: 15-AUG-1997
 APPLICATION NUMBER: US 60/024,055

FILING DATE: 12-Jul-2001
 CLASSIFICATION: <Unknown>
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 09/026,408
 FILING DATE: <Unknown>
 ATTORNEY/AGENT INFORMATION:
 NAME: STEFFE, ERIC K.
 REGISTRATION NUMBER: 36,688
 REFERENCE/DOCKET NUMBER: 1488.03000002
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 202-371-2600
 TELEXFAX: 202-371-5540
 INFORMATION FOR SEQ ID NO: 13:
 MOLECULE TYPE: protein
 SEQUENCE DESCRIPTION: SEQ ID NO: 13:
 US-09-902-684-13

Query Match Score 1987; DB 9; Length 405;
 Best Local Similarity 100.0%; Pred. No. 6.8e-156;
 Matches 392; Conservative 0; Mismatches 0; Gaps 0;

Db 1 MDTIFLWSLLFLFGSQASRCSAQNTFADVLYOEVSLSHKDNNIFSPGLTIVLEMVQ 60
 Db 1 LGAKGKAQQIQTQLKQETTSAGEBEFLYKSCFAISEKKQETFTNANALYLOEGFTVK 120
 Db 61 LGAKGKAQQIQTQLKQETTSAGEBEFLYKSCFAISEKKQETFTNANALYLOEGFTVK 120

Qy 121 EQVLHGNKEFFQSAIKLVDQDACKACAMISTVERKDGTIDKMDMSGREGPLTVLIV 180
 Db 121 EQVLHGNKEFFQSAIKLVDQDACKACAMISTVERKDGTIDKMDMSGREGPLTVLIV 180

Qy 181 NATYFKGDWIKQRKFEDTQLINFTRKNSSTVKIPMKALLRKYGYSESSINYQVLELS 240
 Db 181 NATYFKGDWIKQRKFEDTQLINFTRKNSSTVKIPMKALLRKYGYSESSINYQVLELS 240

Qy 241 YKGDEFSLTILPAEGMDIEEVEKLITACQILKWLSENQEVEEISLRFRKVQYDFKD 300
 Db 241 YKGDEFSLTILPAEGMDIEEVEKLITACQILKWLSENQEVEEISLRFRKVQYDFKD 300

Qy 301 VLYSINTEFLPSGGCDLSGITDSSEVYVQYTKVFFINEDGESEAATSTGHIPIVMSL 360
 Db 301 VLYSINTEFLPSGGCDLSGITDSSEVYVQYTKVFFINEDGESEAATSTGHIPIVMSL 360

Qy 361 AQSOPIANHPPLTMKNTPESTLFMGRVTNP 392
 Db 361 AQSOPIANHPPLTMKNTPESTLFMGRVTNP 392

RESULT 5
 US-10-628-395-13
 Sequence 13, Application US/10628395
 Publication No. US2003008678A1

GENERAL INFORMATION:
 APPLICANT: Ni et al.
 TITLE OF INVENTION: PANCREAS-DERIVED PLASMINOGEN ACTIVATOR INHIBITOR
 NUMBER OF SEQUENCES: 15
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: STEENE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
 STREET: 1100 NEW YORK AVENUE, SUITE 600
 CITY: WASHINGTON
 STATE: DC
 COUNTRY: USA
 ZIP: 20005-3934
 COMPUTER READABLE FORM:

RESULT 5
 US-09-957-485-2
 Sequence 2, Application US/09957485
 Patent No. US20020143165A1
 GENERAL INFORMATION:
 APPLICANT: Human Genome Sciences, Inc. et al.
 TITLE OF INVENTION: Brain-associated Inhibitor of Tissue-Type Plasminogen
 TITLE OF INVENTION: Activator
 FILE REFERENCE: PF336P1

CURRENT APPLICATION NUMBER: US/09/957,485
 CURRENT FILING DATE: 2001-09-21
 PRIOR APPLICATION NUMBER: US/09/521,664
 PRIOR FILING DATE: 2000-03-08
 PRIORITY APPLICATION NUMBER: US 60/123,704
 PRIOR FILING DATE: 1999-03-10
 NUMBER OF SEQ ID NOS: 21
 SOFTWARE: Patentin Ver. 2.1
 SEQ ID NO 2
 LENGTH: 410
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-09-957-485 2

Query Match 39.8%; Score 791.5; DB 9; Length 410;
 Best Local Similarity 39.5%; Pred. No. 5.8e-57;
 Matches 155; Conservative 97; Mismatches 135; Indels 5; Gaps 2;

Qy 6 LWSLLLFFGQAQRCSAQKNTPEAVDLYQEVLSLKD-NIIFSPGLITVLEMVOGAK 64
 Db 6 LFSLLVQSMATGATPPEAAIDLSVNNYRLRATGDEENILFSPSIALAMGMMEGAQ 65
 Qy 65 GKAQQQIRQLKQOETSAGEFLVLSFCSAISEKCKOFTPNANALYQEGFTVKEQYL 124
 Db 66 GSTQKEIRHSMGFDLSLKGEEPSLKEESENWVTAKESSYVMKANSJFVNQNFHNBFL 125
 Qy 125 HGNKEFFQSAIKLKVDFQDAKACADEMISTWVERKTGKIKDMPSGEFFGPPLTRVLVNAIY 184
 Db 126 QMMCKYFNAAVNVHDFSQNVAVANYINKWVENTNNLVKDLSPRDIDAAVTALNAVY 185
 Qy 185 FKGDWKQERKEDTQIINPTKNGSTVPIPMKALLRTKYGPFSESSLN---YQYLELS 240
 Db 186 FGKHNWKQSRPENTRTFSFTKDESEVYQIPMMYQGEGFYGFSDGSENEAGGIYQVEIIP 245
 Qy 241 YKGBDEFSLIILPAEGMDIEEYERKLITAQQLKWLSEMOEQEVEISLPRFKEQKVDFKD 300
 Db 246 YEGBISHMVLVSRQEVLATLEPLVLAQLVBEWANSVKORKVETVPLMGRVTNP 392
 Qy 301 VLYSLNITEIFSGCDLSGGTSSEYYVSQTVQVFREINEDGEATSTGHHIPVIMSL 360
 Db 306 VLGALGTEIFKDANLTGSDNEKEIPLSKAITHKSFLLEVNEBSEAAVSGMIAISRMAV 365
 Qy 361 AQSQFIAHPEFLPKMKNPTESTLFLMGRVTNP 392
 Db 366 LYPOVIVDHPFFLJRNRTGTLLFMGRVMHP 397

RESULT 7
 US-10-355-208-2
 Sequence 2, Application US/10355208
 Publication No. US20040188801
 ; GENERAL INFORMATION:
 ; TITLE OF INVENTION: Brain-Associated Inhibitor of Tissue-Type Plasminogen Activator
 ; FILE REFERENCE: P333P1
 ; CURRENT APPLICATION NUMBER: US/10/355-208
 ; CURRENT FILING DATE: 2003-01-31
 ; PRIOR APPLICATION NUMBER: US/09/521,664
 ; PRIOR FILING DATE: 2000-03-08
 ; SEQ ID NO 2
 ; SOFTWARE: Patentin Ver. 2.1
 ; LENGTH: 410
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-10-355-208-2

CURRENT APPLICATION NUMBER: US/09/987,021
 CURRENT FILING DATE: 2001-11-13
 PRIOR APPLICATION NUMBER: 09/957,485
 PRIOR FILING DATE: 2001-09-21
 PRIOR APPLICATION NUMBER: 09/722,292
 PRIOR FILING DATE: 2000-11-18
 PRIOR APPLICATION NUMBER: 60/1247,971
 PRIOR FILING DATE: 2000-11-14
 PRIOR APPLICATION NUMBER: 09/521,664
 PRIOR APPLICATION NUMBER: 09/348,817
 PRIOR FILING DATE: 1999-07-08
 PRIOR APPLICATION NUMBER: 60/123,704
 PRIOR FILING DATE: 1999-03-10
 PRIOR APPLICATION NUMBER: 08/948,997
 PRIOR APPLICATION NUMBER: 60/028,117
 PRIOR FILING DATE: 1998-10-11

RESULT 6
 US-09-987-021-2
 Sequence 2, Application US/0987021
 PATENT NO. US2002015147A1
 GENERAL INFORMATION:
 APPLICANT: Yeeles, et al.
 TITLE OF INVENTION: Brain-Associated Inhibitor of Tissue-Type Plasminogen Activator
 FILE REFERENCE: PF336P2
 CURRENT APPLICATION NUMBER: US/09/987,021
 CURRENT FILING DATE: 2001-11-13
 PRIOR APPLICATION NUMBER: 09/957,485
 PRIOR FILING DATE: 2001-09-21
 PRIOR APPLICATION NUMBER: 09/722,292
 PRIOR FILING DATE: 2000-11-18
 PRIOR APPLICATION NUMBER: 60/1247,971
 PRIOR FILING DATE: 2000-11-14
 PRIOR APPLICATION NUMBER: 09/521,664
 PRIOR APPLICATION NUMBER: 09/348,817
 PRIOR FILING DATE: 1999-07-08
 PRIOR APPLICATION NUMBER: 60/123,704
 PRIOR FILING DATE: 1999-03-10
 PRIOR APPLICATION NUMBER: 08/948,997
 PRIOR APPLICATION NUMBER: 60/028,117
 PRIOR FILING DATE: 1998-10-11

NUMBER OF SEQ ID NOS: 18
 SOFTWARE: Patentin Ver. 2.1
 SEQ ID NO 2
 LENGTH: 410
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-09-987-021-2

Query Match 39.8%; Score 791.5; DB 9; Length 410;
 Best Local Similarity 39.5%; Pred. No. 5.8e-57;
 Matches 155; Conservative 97; Mismatches 135; Indels 5; Gaps 2;

Qy 6 LWSLLLFFGQAQRCSAQKNTPEAVDLYQEVLSLKD-NIIFSPGLITVLEMVOGAK 64
 Db 6 LFSLLVQSMATGATPPEAAIDLSVNNYRLRATGDEENILFSPSIALAMGMMEGAQ 65
 Qy 65 GKAQQQIRQLKQOETSAGEFLVLSFCSAISEKCKOFTPNANALYQEGFTVKEQYL 124
 Db 66 GSTQKEIRHSMGFDLSLKGEEPSLKEESENWVTAKESSYVMKANSJFVNQNFHNBFL 125
 Qy 125 HGNKEFFQSAIKLKVDFQDAKACADEMISTWVERKTGKIKDMPSGEFFGPPLTRVLVNAIY 184
 Db 126 QMMCKYFNAAVNVHDFSQNVAVANYINKWVENTNNLVKDLSPRDIDAAVTALNAVY 185
 Qy 185 FKGDWKQERKEDTQIINPTKNGSTVPIPMKALLRTKYGPFSESSLN---YQYLELS 240
 Db 186 FGKHNWKQSRPENTRTFSFTKDESEVYQIPMMYQGEGFYGFSDGSENEAGGIYQVEIIP 245
 Qy 241 YKGBDEFSLIILPAEGMDIEEYERKLITAQQLKWLSEMOEQEVEISLPRFKEQKVDFKD 300
 Db 246 YEGBISHMVLVSRQEVLATLEPLVLAQLVBEWANSVKORKVETVPLMGRVTNP 392
 Qy 301 VLYSLNITEIFSGCDLSGGTSSEYYVSQTVQVFREINEDGEATSTGHHIPVIMSL 360
 Db 306 VLGALGTEIFKDANLTGSDNEKEIPLSKAITHKSFLLEVNEBSEAAVSGMIAISRMAV 365
 Qy 361 AQSQFIAHPEFLPKMKNPTESTLFLMGRVTNP 392
 Db 366 LYPOVIVDHPFFLJRNRTGTLLFMGRVMHP 397

RESULT 7
 US-10-355-208-2
 Sequence 2, Application US/10355208
 Publication No. US20040188801
 ; GENERAL INFORMATION:
 ; TITLE OF INVENTION: Brain-Associated Inhibitor of Tissue-Type Plasminogen Activator
 ; FILE REFERENCE: P333P1
 ; CURRENT APPLICATION NUMBER: US/10/355-208
 ; CURRENT FILING DATE: 2003-01-31
 ; PRIOR APPLICATION NUMBER: US/09/521,664
 ; PRIOR FILING DATE: 2000-03-08
 ; SEQ ID NO 2
 ; SOFTWARE: Patentin Ver. 2.1
 ; LENGTH: 410
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-10-355-208-2

Query Match 39.8%; Score 791.5; DB 9; Length 410;
 Best Local Similarity 39.5%; Pred. No. 5.8e-57;
 Matches 155; Conservative 97; Mismatches 135; Indels 5; Gaps 2;

Qy 6 LWSLLLFFGQAQRCSAQKNTPEAVDLYQEVLSLKD-NIIFSPGLITVLEMVOGAK 64
 Db 6 LFSLLVQSMATGATPPEAAIDLSVNNYRLRATGDEENILFSPSIALAMGMMEGAQ 65
 Qy 65 GKAQQQIRQLKQOETSAGEFLVLSFCSAISEKCKOFTPNANALYQEGFTVKEQYL 124

RESULT 8
US-10-752-041-2
; Sequence 2, Application US/10752041
; Publication No. US004203101A1
; GENERAL INFORMATION:
; APPLICANT: Hastings, et al.
; TITLE OF INVENTION: Brain-Associated Inhibitor of Tissue-Type Plasminogen Activator
; FILE REFERENCE: PF336P3
; CURRENT APPLICATION NUMBER: US/10/752, 041
; PRIOR APPLICATION NUMBER: 10/555, 208
; PRIOR APPLICATION NUMBER: 09/987, 021
; PRIOR APPLICATION NUMBER: 2001-11-13
; PRIOR APPLICATION NUMBER: 09/957, 485
; PRIOR APPLICATION NUMBER: 09/722, 292
; PRIOR APPLICATION NUMBER: 2000-11-28
; PRIOR APPLICATION NUMBER: 60/247, 971
; PRIOR APPLICATION NUMBER: 09/521, 664
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: 09/348, 817
; PRIOR FILING DATE: 1997-07-08
; PRIOR APPLICATION NUMBER: 60/123, 704
; PRIOR FILING DATE: 1999-03-10
; PRIOR APPLICATION NUMBER: 08/948, 997
; PRIOR FILING DATE: 1997-10-10
; PRIOR APPLICATION NUMBER: 60/028, 117
; PRIOR FILING DATE: 1998-10-11
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: PatentIn Ver. 2.1
; LENGTH: 410
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-752-041-2

Query Match 39 8%; Score 791.5; DB 17; Length 410;
Best Local Similarity 39.5%; Pred. No. 5.8e-57;
Matches 155; Conservative 97; Mismatches 135; Indels 5; Gaps 2;

Qy 6 IWSLILFFGSGQASRCSAQRNTEFAVLDYOEVSLSHKD-NIIFSPGLTIVLEMVQJAK 64
Db 6 LFLSLLVLQSMATGATPEEAADLSVNMMRLRANGEDNLFLPLSLAMGNMELAQ 65

Qy 65 GKAQQIIRQLKQOETSAGEBFLVKSFCSAISEKKOETENANALYQEGFTVKQYI 124
Db 66 GSTQEIRHSMNGYDSKNGEFSFELKFESFMNTAKESOYMKLANSFLYQNGFTVNEBFL 125

Qy 125 HGNKEFFQSAIKLVDQDAKACAEIMISTWERTDKLKDMSGEFFGPLTRLVLYNAIY 184
Db 126 QMMCKYFNAEVNDFDSQNVAVANYINWENTNNLQLVSPRDEAATYLALINAVY 185

Qy 185 FGKDWKQKPERKEDTQLINPTKNGSTYKIPMKALLRTKYGYFSESSLN---YQVLELS 240
Db 186 FGKWKQSFRPENTRTPSFTKDESEVQIPMTCQGFBYGEFSGSNAGGYQVQLP 245

Qy 241 YKGDEFLSLITLPAQMDTBEEVKLTAAQILKLNSEMQEVEEISLPRFKYEQKVDPKD 300
Db 246 YEGDEISMMLVLSQEVPLATEPLVKAQLVVEEANSVCKYEVYLERFTVEQEDLKD 305

Qy 301 VLYSLNITEFSGGGDLSGITDSSVVYVSQVTKVFFINEDEGSEAATSTGHHIPVMSL 360
Db 306 VLKAGITEFIKDNLTGSDNEKIFLSKAHKSKFELVNEECSEAAVSGMAISRNAV 365

Qy 361 AQSQFTANHPFLFTKHNPTESTLFMGRVTNP 392
Db 366 LYPQVIVDHBFFFLIRNRRTGTLFMGRVNHFP 397

RESULT 9
US-09-957-485-3
; Sequence 3, Application US/09957485
; Patent No. US2002143165A1
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc. et al.
; TITLE OF INVENTION: Brain-Associated Inhibitor of Tissue-Type Plasminogen
; FILE OF INVENTION: Activator
; FILE REFERENCE: PF336P1
; CURRENT APPLICATION NUMBER: US/09/957, 485
; PRIOR FILING DATE: 2001-09-01
; PRIOR APPLICATION NUMBER: US 09/521, 664
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: 10/555, 208
; PRIOR FILING DATE: 1999-03-10
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 410
; TYPE: PRT
; ORGANISM: Gallus gallus
US-09-957-485-3

Query Match 39.7%; Score 788.5; DB 9; Length 410;
Best Local Similarity 40.0%; Pred. No. 1e-56;
Matches 158; Conservative 92; Mismatches 138; Indels 7; Gaps 3;

Qy 5 FLWSSLILFFQSOASCSAQT---EFAVDLYQETVLSLHD-NIIFSPGLTIVLEMVQJAK 61
Db 3 FLGLSLILVLPSKAFTNFDETTIAELSUNVYNQRLRAAREDENTIFCPLSTAIGMIEL 62

Qy 62 GAKGKAOQOQITQLKQOETSAGEBEFLVLSFCSA-SEKROEFTPNANALYQEGFTVKE 121
Db 63 GAHTGTILKEPHSLGFDSLANGEFFFLKLDSMATEEHSVYLTANSVYQNGFHVSE 122

Qy 122 QYLHGKNEEFFQSAIKLVDQDAKACAEIMISTWERTDKLKDMSGEFFGPLTRLVLYN 181
Db 123 KFLQLVRYKPFRAEVENDFOSAAVATHINGWENETNNMIDFVSSRDSALTLVLIN 182

Qy 182 AIFYKGWQKPERKEDTQLINPTKNGSTYKIPMKALLRTKYGYFSESSLN---YQVLELS 237
Db 183 AIFYKGWKSQFRPENTRTPSFTKDESEVQIPMTCQGFBYGEFSGSNAGGYQVQL 242

Qy 238 ELSYKGDBFSLTILPAEGMDIEVKLTAAQILKLNSEMQEVEEISLPRFKYEQKVDPKD 297

Db 243 EPEYGEBSMIVLSSRQEVLVYPLVKAQLVVEEANSVCKYEVYLERFTVEQEDLKD 302

Qy 298 FKDVLSUNTBISFGCDLGSITDSSVVYVSQVTKVFFINEDEGSEAATSTGHHIPV 357
Db 303 LXDVLKGJLGEVVERSADLTAMSDNKELYLAKAHKSKFELVNEECSEAAVSGMAISR 362

Qy 358 MSIAQSOFIANHPFLFTKHNPTESTLFMGRVTNP 392

RESULT 10

Db 363 MAVLYPQVTVDHPPPEFLVRNRRTGFLFNGRVMHP 397 ; Sequence 3, Application US/10355208
; Publication No. US20040038880A1
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc. et al.
; TITLE OF INVENTION: Brain-Associated Inhibitor of Tissue-Type Plasminogen Activator
; FILE REFERENCE: PF336P1
; CURRENT APPLICATION NUMBER: US/10/355,208
; CURRENT FILING DATE: 2003-01-31
; PRIORITY APPLICATION NUMBER: US/09/521,664
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: US 60/123,704
; PRIORITY NUMBER: 1999-03-10
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 410
; TYPE: PRT
; ORGANISM: Gallus gallus
; US-10-355208-3

Query Match 39.7% Score 788.5; DB 15; Length 410;
Best Local Similarity 40.0%; Pred. No. 1e-56;
Matches 158; Conservative 92; Mismatches 138; Indels 7; Gaps 3;

5 FLWSPLLLEFGSQASRCSAQKNT-EFADVLQEVSLSHKD-NIIFSPGLITVLLEMVQL 61
| | | | | :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
3 FLGLLSLLVLPSSAKFTNPDETAELSVNVNLRAEDENILFPLSTAIAMGMIEL 62

62 GAKGKAQOIROTLQKQETTSAGREFLVKSFCSAISEKKQETFNANALYQEGFTVKE 121
| | | | | :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
63 GAHTTLLKEIRHSIGFDSLNGEFTFLDLSMATAESHVLVNNANSLVQNGHVS 122

122 QYLHGNKEFFOSAKIYLVDFOQAKACAMISTVERKDKGKIKDMFSGEEFGPLTRLVN 181
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 123 KFLQVKYKFAEVENDSOSAVATHINKWVNHNMM-KDFVSSRDSFSLTHVLIN 182

182 AIVYKGDKIKQKFKEPDQLINFTKNGSTVKPMMRLRKYGYSESSLN---YQVL 237
| | | | | :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
183 AIVYKGKWKSQPFERTFSFKDDTEVQIPMMYQOGEFYGEFDGSNEAGGIYQVL 242

238 ELSVKGDESSLILPBGMDLVEEVLKLITAQIQLWSEMOBEVEVTSLPFKVQBQVD 297
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 243 EIPYEGDESMIMVLSROBPLVTLPLVKASLNEVANSVSKQKVYVPLFTVEQID 302
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Qy 298 FDVFLYSINITEIFSGGDLSGSGITDSEBVYVSQVTOKYFFINEDSEAAATSTGHIHPVI 357
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 303 LKDVVKLGIGITEVFSRASADLTAMSNEKLYLAFKAFLEVNEESEAASGMIAISR 362
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Qy 358 MSLAQSOFTANIFLFLMKHNTTESTILEMGRTNP 392
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 363 MAVLYPQVIVDHFVFFLVRNRRTGTVLFMGRVMP 397
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|

RESULT 12

US-10-752-041-3

Db 182 AIVYKGDKIKQKFKEPDQLINFTKNGSTVKPMMRLRKYGYSESSLN---YQVL 237 ; Sequence 3, Application US/10752041
; Publication No. US2004020310A1
; GENERAL INFORMATION:
; APPLICANT: Hastings, et al.
; TITLE OF INVENTION: Brain-Associated Inhibitor of Tissue-Type Plasminogen Activator
; FILE REFERENCE: PF336P3
; CURRENT APPLICATION NUMBER: US/10/752,041
; CURRENT FILING DATE: 2004-01-07
; PRIORITY NUMBER: 10/355,208
; PRIOR FILING DATE: 2003-01-31
; PRIOR APPLICATION NUMBER: 09/987,021
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: 09/957,485
; PRIOR FILING DATE: 2001-09-21
; PRIOR APPLICATION NUMBER: 09/722,292
; PRIOR FILING DATE: 2000-11-08
; PRIOR APPLICATION NUMBER: 60/247,971
; PRIOR FILING DATE: 2000-11-14

Db 183 AIVYKGKWKSQPFERTFSFKDDTEVQIPMMYQOGEFYGEFDGSNEAGGIYQVL 242

238 ELSVKGDESSLILPBGMDLVEEVLKLITAQIQLWSEMOBEVEVTSLPFKVQBQVD 297
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 243 EIPYEGDESMIMVLSROBPLVTLPLVKASLNEVANSVSKQKVYVPLFTVEQID 302
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Qy 298 FDVFLYSINITEIFSGGDLSGSGITDSEBVYVSQVTOKYFFINEDSEAAATSTGHIHPVI 357
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 303 LKDVVKLGIGITEVFSRASADLTAMSNEKLYLAFKAFLEVNEESEAASGMIAISR 362
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Qy 358 MSLAQSOFTANIFLFLMKHNTTESTILEMGRTNP 392
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 363 MAVLYPQVIVDHFVFFLVRNRRTGTVLFMGRVMP 397
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|

RESULT 11

US-10-355-208-3

PRIOR APPLICATION NUMBER: 09/521,664
 ; PRIOR FILING DATE: 2000-03-08
 ; PRIOR APPLICATION NUMBER: 09/748,817
 ; PRIOR FILING DATE: 1999-07-08
 ; PRIOR APPLICATION NUMBER: 1999-03-10
 ; PRIOR FILING DATE: 1999-08/948,997
 ; PRIOR APPLICATION NUMBER: 1997-10-10
 ; PRIOR FILING DATE: 1996-10-11
 ; NUMBER OF SEQ ID NOS: 21
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO: 3
 ; LENGTH: 410
 ; TYPE: PRT
 ; ORGANISM: Gallus gallus
 US-10-752-041-3

Query Match 39.7%; Score 78.5; DB 17; Length 410;
 Best Local Similarity 40.0%; Pred. No. 1e-56; Indels 7; Gaps 3;
 Matches 158; Conservative 92; Mismatches 138; Index 7;

Qy 5 FLWSLLLURFGSQASRCSAQKQT--EPAVDLYQEVSLSHHD-NIIFSPLGITLYLEMVQL 61
 Db 3 FLGLLSSLYLPSTAFKNTNPDETAIESTAGREFLYLKSFCSAISEKQEFTEFLNANALYLOEGFTKE 121
 Qy 62 GAKGRQQQIROTQKOCRTSAGREFLYLKSFCSAISEKQEFTEFLNANALYLOEGFTKE 121
 Db 63 GAHTTLEBIRHSUGDFLKGSEETFLKDSDMATTESHYVLNMANSIVQONGPHVSE 122

Qy 122 QYLHGNEKFQFOSAKLVDQDAAKACFMISTVERKTGKIKDMFSGEEFGLPLTRLYVN 181
 Db 123 KFLQVKKYFKAEVENIDSQSAAVATHINKWVENTNMTKDFVSSRDTSALTHLVIN 182

Qy 182 AIVFGDWKQKFERKDGTOLINTKKNGSTVKIPMKALITKTYGYFSESSLN---YQVY 237
 Db 183 AIRFGGAKNSQFRPENRTFSFKDDTEVQPMHQGEFFYYGFSDSNEAGIYVL 242

Qy 238 ELSYKGDBEFLSLLTPAEGMDIEEVKELITAQQLKWLSEMQEEVEISLUPRFKEVQKVD 297
 Db 243 EIPYEGDEISMMIVLRSOBPVLYTSLPVKASLINEWANSVKKQKVEVTLPRFTVEQKID 302

Qy 298 FKDVLYSNITEFLSGGDLGSLGTSSEBVYISQVOKVPEINSDGSEATSGIHIVI 357
 Db 303 LKDYLKGJLIGITEFSSRLDTANSDEBLYLAFAKAPLEVNEBSEAAASCMA:SR 362

Qy 358 MSLAQSOFTANTHPLFLMKNPTESTLFMGRVTP 392
 Db 363 MAVLYPQIVDHFVFLVRNRTGTGTVLFMGRVWHP 397

RESULT 13
 US-10-023-634-88
 ; Sequence 88, Application US/10023634
 ; GENERAL INFORMATION:
 ; ; PUBLICATION NO. US20030236389A1
 ; ; APPLICANT: Shimkets, Richard A
 ; ; APPLICANT: Colman, Steven D
 ; ; APPLICANT: Spivek, Kimberly A
 ; ; APPLICANT: Ballinger, Robert A
 ; ; APPLICANT: Guo, Xaojia
 ; ; APPLICANT: Tchernov, Valizar T
 ; ; APPLICANT: Shanoy, Suresh G
 ; ; APPLICANT: Li, Li
 ; ; APPLICANT: Elerman, Karen
 ; ; APPLICANT: Zerhusen, Bryan D
 ; ; APPLICANT: Patterson, Meera
 ; ; APPLICANT: Casman, Stacie J
 ; ; APPLICANT: Boldog, Ferenc
 ; ; APPLICANT: Gusev, Vladimir Y
 ; ; APPLICANT: Burgess, Catherine E
 ; ; APPLICANT: Edinger, Shlomit R
 ; ; APPLICANT: Gangoli, Zeha A

APPLICANT: Malivankar, Uriel M
 ; APPLICANT: Gunther, Erik
 ; APPLICANT: Smilhson, Glenda
 ; APPLICANT: Millet, Isabelle
 ; APPLICANT: Gerlach, Valerie
 ; TITLE OF INVENTION: Proteins, Polynucleotides Encoding Them and Methods of
 ; CURRENT APPLICATION NUMBER: US/10/023,634
 ; CURRENT FILING DATE: 2002-06-28
 ; PRIOR APPLICATION NUMBER: 60/256,025
 ; PRIOR FILING DATE: 2000-12-15
 ; PRIOR APPLICATION NUMBER: 60/265,163
 ; PRIOR FILING DATE: 2001-01-30
 ; PRIOR APPLICATION NUMBER: 60/272,929
 ; PRIOR FILING DATE: 2001-03-02
 ; PRIOR APPLICATION NUMBER: 60/274,864
 ; PRIOR FILING DATE: 2001-03-09
 ; PRIOR APPLICATION NUMBER: 60/276,688
 ; PRIOR FILING DATE: 2001-03-16
 ; PRIOR APPLICATION NUMBER: 60/277,880
 ; PRIOR FILING DATE: 2001-03-22
 ; PRIOR FILING DATE: 2001-04-25
 ; PRIOR APPLICATION NUMBER: 60/309,246
 ; PRIOR FILING DATE: 2001-07-31
 ; PRIOR FILING DATE: 2001-08-29
 ; NUMBER OF SEQ ID NOS: 132
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO: 88
 ; LENGTH: 360
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-10-023-634-88

Query Match 35.5%; Score 706; DB 14; Length 360;
 Best Local Similarity 43.3%; Pred. No. 5.e-50;
 Matches 158; Conservative 66; Mismatches 131; Index 10; Gaps 9;

Qy 32 DLYQBVSLSHKD-NIIFSPLGITLVLENVOLGAKGKQQQIRQLT--KQQETSAGEBFLV 88
 Db 2 DLYKLAKESPDKNIFPSVSISSALAMLSGAKGSTATQLEVFLNLTIEADIHQG 61
 Qy 89 LKSFGCSAISEKKQEFETFLNANALYLOEGFTKEQYLGKNEFFOSAIKLVDFQD-AKACA 147
 Db 62 FQHLHLNRPDNKQLQKTNALFVDSLKLJDSFLEDVKKLYGAEVQSYDFSDPRAEAK 121

Qy 148 EMISIWVERTDGCKKOMFSGEFFGPTRLYVNAYFKGKWKOKRKEDQTLNTFTKCN 207
 Db 122 KQINQWVKGGTKGKIDLS--DLDPTDRLVNAYFKGKWKTPDPNTREEYVDE 179

Qy 208 GSTVRLPKMKALLRTKYGFSESSLNIVLSEYKGDDEFSLJILPAGMDIEEYVKLT 267
 Db 180 TTIVKPMKALLRTKYGFSESSLNIVLSEYKGDDEFSLJILPAGMDIEEYVKLT 236

Qy 268 AQQIKWLSMEOREBEVEISLSPRFKEQKVDFLVLSNTEIPSQGCDLSGITSUSSEVY 327
 Db 237 PETLKWTWLSLTKRSVEVLPKPLKELEYSYDLDVLRLGTDLSRADLSGISEBKDLK 296

Qy 328 VSQYOKVKEFINEEDGSAATSDFGHHIPVIMSLAQSORIATHPFLIMKHNPTESLFG 387
 Db 297 VSKVWKAFLVEEGBTAAAATGV-TIVPRLPPEFKANRPFLFLIRDNPNTGSLFPG 355

Qy 388 RVTPN 392
 Db 356 KVNNP 360

RESULT 14
 US-10-037-417-67
 ; Sequence 67, Application US/10037417
 ; Publication No. US2004005806A1

GENERAL INFORMATION:

APPLICANT: Kekuda, Ramesh
 APPLICANT: Alsobrook II, John P
 APPLICANT: Tchernev, Velizar T
 APPLICANT: Liu, Xiaochong
 APPLICANT: Sotyek, Kimberly A
 APPLICANT: Patterson, Meera
 APPLICANT: Gross, William M
 APPLICANT: Lepley, Denise M
 APPLICANT: Burgess, Catherine E
 APPLICANT: Vernet, Corine A.M.
 APPLICANT: Li, Li
 APPLICANT: Gorman, Linda
 APPLICANT: Edinger, Shlomit R
 APPLICANT: Sciore, Paul
 APPLICANT: Ellerman, Karen
 APPLICANT: Malyankar, Uriel M
 APPLICANT: Rothenberg, Mark
 APPLICANT: Stone, David J
 APPLICANT: Boldog, Ferenc L
 APPLICANT: Guo, Xiaojia
 APPLICANT: Shenoy, Suresh G
 APPLICANT: Anderson, David W
 APPLICANT: Padigaru, Muralidhara
 APPLICANT: Faupier Jr, Raymond J
 APPLICANT: Miller, Charles E
 APPLICANT: Eisen, Andrew J
 TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
 FILE REFERENCE: 214-02-335
 CURRENT APPLICATION NUMBER: US/10/037,417
 CURRENT FILING DATE: 2002-09-20
 PRIOR APPLICATION NUMBER: 60/260,018
 PRIOR FILING DATE: 2001-01-05
 PRIOR APPLICATION NUMBER: 60/260,360
 PRIOR FILING DATE: 2001-01-08
 PRIOR APPLICATION NUMBER: 60/272,411
 PRIOR FILING DATE: 2001-02-18
 PRIOR APPLICATION NUMBER: 60/272,817
 PRIOR FILING DATE: 2001-03-02
 PRIOR APPLICATION NUMBER: 60/291,186
 PRIOR FILING DATE: 2001-05-15
 PRIOR APPLICATION NUMBER: 60/303,231
 PRIOR FILING DATE: 2001-07-05
 PRIOR APPLICATION NUMBER: 60/305,060
 PRIOR FILING DATE: 2001-07-12
 PRIOR APPLICATION NUMBER: 60/318,405
 PRIOR FILING DATE: 2001-09-10
 PRIOR APPLICATION NUMBER: 60/318,700
 PRIOR FILING DATE: 2001-09-12
 NUMBER OF SEQ ID NOS: 227
 SEQ ID NO: 67
 LENGTH: 360
 TYPE: PRT
 ORGANISM: Artificial Sequence
 FEATURE: Description of Artificial Sequence: Serpin
 OTHER INFORMATION: Consensus Sequence
 US-10-037-17-67

Query Match 35.5%; Score 706; DB 15; Length 360;
 Best Local Similarity 43.3%; Matches 66; Mismatches 131; Indels 10; Gaps 8;

Qy 32 DLYQEVSLSHD-NIIFSPGIVTIVLEMVQAGKGAQQIQTOL--KQQTSGAGEFLY 88
 Do 2 DLYKELAKESPKNLFFPSVSISSALMLSLGKGSTATQILEVLGFNLTESEADTHG 61

Qy 89 LKSFCSAISERKQEFITNLANALYI-QEGITVKEQYLGNKEFQSAIKLVDEQD-AKACA 147
 Do 62 FQHLHILNRLNDNKLQLKTANALFVDKSLLDSQFSDPAREAK 121

Qy 148 EMISTWVERKTDGKLKDMEFSGEERGPRLTVLYNAIFKGDWKQFERKEDTOLINTFKNN 207

Db 122 KQINDWVKCKTQKIDULS-DLDPTDRVLVNAIFKGRWKTPDPENTREDFYDE 179
 Qy 208 GSTVKIPMKRALKRTRKGYFSESSLNVQVLESYKGDEFSLTLIIPAEQMDIEBEVKLT 267
 Db 180 TTIVKVPMSQTSQRT-FYGRDEELNCQVLEPYKNA-SMILLPDEG-GLEYEKALT 236
 Qy 268 AQQILKWLBMQEVEEVSLSPLPKFKEVDFDVLYSNTEBFSGCDLUSGITSSEVY 327
 Db 237 PETLKWKTKSLTRSVVELYLPKFKLEISYDLKDVLEKLGTIDLSNKADLSGISEDKDLK 296

Qy 328 VSOTQKVFEEINDGSAATSTGIHHPVIMSACQQFIANHPPFLFIMKHNPTPEAILYNG 387
 Db 297 VSKVTHKAFLVNEEGTAAATGV-LIVPRLSLPPBEFKANRPFLFLRDNPTGSILFNG 355

Qy 388 RVTNP 392
 Db 356 KVNP 360

RESULT 15
 US-03-823-187-31
 ; Sequence 31, Application US/09823187
 ; Publication No. US20030036954A1
 ; GENERAL INFORMATION:
 ; PUBLICATOR: Burgess, Catherine Y
 ; APPLICANT: Gusev, Vladimir Y
 ; APPLICANT: Liu, Xiaohong
 ; APPLICANT: Majumder, Kumud
 ; APPLICANT: Patigaru, Muralidhar
 ; APPLICANT: Parturian, Meera
 ; APPLICANT: Shimmers, Richard A
 ; APPLICANT: Spaderna, Steven K
 ; APPLICANT: Spytek, Kimberly
 ; APPLICANT: Taupier, Raymond J
 ; TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME
 ; FILE REFERENCE: 15966-745
 ; CURRENT APPLICATION NUMBER: US/09/823,187
 ; CURRENT FILING DATE: 2001-03-29
 ; PRIOR APPLICATION NUMBER: 60/193,339
 ; PRIOR FILING DATE: 2000-03-30
 ; PRIOR APPLICATION NUMBER: 60/193,205
 ; PRIOR FILING DATE: 2000-03-30
 ; PRIOR APPLICATION NUMBER: 60/195,343
 ; PRIOR FILING DATE: 2000-04-05
 ; PRIOR APPLICATION NUMBER: 60/195,088
 ; PRIOR FILING DATE: 2000-04-06
 ; PRIOR APPLICATION NUMBER: 60/195,005
 ; PRIOR FILING DATE: 2000-04-06
 ; PRIOR APPLICATION NUMBER: 60/195,792
 ; PRIOR FILING DATE: 2000-04-10
 ; PRIOR APPLICATION NUMBER: 60/196,556
 ; PRIOR FILING DATE: 2000-04-14
 ; NUMBER OF SEQ ID NOS: 103
 ; SOFTWARE: Patentin Ver. 2.1
 ; SEQ ID NO: 31
 ; LENGTH: 377
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-09-823-187-31
 ; Query Match 34.2%; Score 679.5; DB 10; Length 377;
 ; Best Local Similarity 39.7%; Pred. No. 9.6-48;
 ; Matches 150; Conservative 68; Mismatches 143; Indels 17; Gaps 6;

Qy 23 AQXNTEPAYDVLQEVSLSHD-NIIFSPGIVTIVLEMVQAGKGAQQIQTOL-KQOE 79

9	Dib	ASANADAFSILYKELVEQNPDKNITFSPVISISSLALMSIGAKNTATQILEVGENLTLTE	68
80	Qy	TSAGEEFLVKSFCSAISEKKQEFENLNANALYLOEGFTYKEQYLHGNKEFFQSAIKLVD	139
69	Db	TSEAEHQGFOHLLQTLNRPDTGLQLTGNALFVDKSLKLIDFEDSRLYQSEVSUD	128
140	Qy	FQDAAKACMSTWVERKTDKIKMFSGEFGPULTRVLVNA YFKGDWKOKERKDQ	199
129	Db	FSDPEAKRQINDWVERKTQEKIDL - KLDSDTIVLVNVY YFKGKWKPKDPPLTB	186
200	Qy	LINTFKNGNSTVKIPPMKALLRTKGYFSESSSLNQVLELSYGKDFBSLJLILPAEGMDI	255
187	Db	EEFDHYDRKTTIVKPMINQL - GTFYFRDEBLNKVLELPYKGATSMFILEDVGKL	244
260	Qy	EEVEKLITAQQILKWLSEMQUEEVEISLPRFKEQRVDFKDVLYSUNITEFSCGCDLSG	311
245	Db	EQEYAALSPETRKWLNMPEEVEIYLPKPSIEGTYDLDKVLAUGITDLSNADLSG	304
320	Qy	ITDSSEPYVSQUTYKPFINEGSEATSTGI --- -HIVPMVSLAQSOFTIANHPHPLFI	371
305	Db	ISDEDLIRKSVAVKAVTLEYDEGEETEAATGAIIVPERSLBPIL --- -BFTADPFLFL	355
375	Qy	MKHNPNTSILPNGRVTPNP	392
360	Db	IYDNPNTSILPNGRVNP	377



Copyright GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 21, 2004, 06:38:56 ; Search time 40 Seconds
(without alignments)
649.16 Million cell updates/sec

Title: US-10-628-395-2

Perfect score: 1987

Sequence: 1 MDTFLWSLILFFGQSASR.....FIMKHNPTEISILFGGRVTPP 392

Scoring table: BLOSUM62

GapOp 10.0 , Gapext 0.5

Searched:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA;*

1: /cgm2_6/prodata/1/iaas/5A-COMB.pep:*
 2: /cgm2_6/prodata/1/iaas/5B-COMB.pep:*
 3: /cgm2_6/prodata/1/iaas/6A-COMB.pep:*
 4: /cgm2_6/prodata/1/iaas/6B-COMB.pep:*
 5: /cgm2_6/prodata/1/iaas/PCUTIS-COMB.pep:*
 6: /cgm2_6/prodata/1/iaas/backfile1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query	Match	Length	DB ID	Description
1	1987	100.0	392	3	US-09-026-408-2	Sequence 2, Appli
2	1987	100.0	392	4	US-09-902-664-2	Sequence 2, Appli
3	1987	100.0	405	3	US-09-036-408-13	Sequence 13, Appli
4	1987	100.0	405	4	US-09-026-684-13	Sequence 2, Appli
5	1777.5	89.5	406	1	US-09-434-881-2	Sequence 2, Appli
6	1777.5	89.5	406	3	US-09-977-771-2	Sequence 2, Appli
7	1777.5	89.5	406	3	US-09-361-773-2	Sequence 2, Appli
8	791.5	39.8	410	3	US-08-948-997-2	Sequence 2, Appli
9	791.5	39.8	410	3	US-09-348-817A-2	Sequence 2, Appli
10	791.5	39.8	410	4	US-09-229-292-2	Sequence 2, Appli
11	788.5	39.7	410	3	US-09-148-817A-3	Sequence 3, Appli
12	788.5	39.7	410	4	US-09-292-292-3	Sequence 3, Appli
13	756	38.0	407	3	US-08-948-997-3	Sequence 3, Appli
14	751	37.8	407	1	US-08-887-823B-2	Sequence 2, Appli
15	751	37.8	407	2	US-08-987-040-2	Sequence 2, Appli
16	751	37.8	407	2	US-09-233-237-2	Sequence 2, Appli
17	651.5	32.8	420	1	US-08-887-823B-4	Sequence 4, Appli
18	651.5	32.8	420	2	US-08-987-040-4	Sequence 4, Appli
19	651.5	32.8	420	2	US-09-233-237-4	Sequence 4, Appli
20	649	32.7	407	1	US-08-558-147B-2	Sequence 2, Appli
21	643	32.4	390	3	US-09-266-910-3	Sequence 3, Appli
22	642.5	32.3	406	1	US-08-487-823B-5	Sequence 5, Appli
23	642.5	32.3	406	2	US-08-987-040-5	Sequence 5, Appli
24	642.5	32.3	420	2	US-09-233-237-5	Sequence 4, Appli
25	641	32.3	390	3	US-09-266-910-4	Sequence 2, Appli
26	595	29.9	376	3	US-09-200-965-2	Sequence 4, Appli
27	591.5	29.8	425	4	US-10-024-427-2	Sequence 4, Appli

ALIGNMENTS

RESULT 1
US-09-026-408-2
; Sequence 2, Application US/09026408
; Patent No. 630338
; GENERAL INFORMATION:
; APPLICANT: Ni et al.
; TITLE OF INVENTION: PANCREAS-DERIVED PLASMINOGEN ACTIVATOR
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
; STREET: 1100 NEW YORK AVENUE, SUITE 600
; CITY: WASHINGTON
; COUNTRY: DC
; ZIP: 20005-3934
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC Compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/026,408
; FILING DATE: Herewith
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/934,011
; FILING DATE: 15-AUG-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/024,056
; FILING DATE: 16-AUG-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: STEFFE, ERIC K.
; REGISTRATION NUMBER: 36,688
; REFERENCE/DOCKET NUMBER: 1488.0300002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-371-1600
; TELEFAX: 202-371-2540
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 332 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: Protein
US-09-026-408-2

RESULT 2
US-09-902-684-2
Sequence 2, Application US/09902684
GENERAL INFORMATION:
APPLICANT: Ni et al.
TITLE OF INVENTION: PANCREAS-DERIVED PLASMINOGEN ACTIVATOR INHIBITOR

NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: STEENE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 NEW YORK AVENUE, SUITE 600
CITY: WASHINGTON
STATE: DC
COUNTRY: USA
ZIP: 20005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/902,684
FILING DATE: 12-JUL-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/026,408
FILING DATE: UNKNOWN
APPLICATION NUMBER: US 60/024,056
FILING DATE: 16-AUG-1996
ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K.
REGISTRATION NUMBER: 36,688
REFERENCE DOCKET NUMBER: 1488.03000002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2640
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 392 amino acids
TYPE: amino acid
TOPOLOGY: Linear
MOLECULE TYPE: Protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:

RESULT 3
US-09-026-408-13
Sequence 13, Application US/09026408
; Patent No. 6303338
; GENERAL INFORMATION:
; APPLICANT: Ni et al.
; TITLE OF INVENTION: PANCREAS-DERIVED PLASMINOGEN ACTIVATOR
; TITLE OF INVENTION: INHIBITOR
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: STEENE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
; STREET: 1100 NEW YORK AVENUE, SUITE 600
; CITY: WASHINGTON
; STATE: DC
; COUNTRY: USA
; ZIP: 20005-3934
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US 60/026,408
; FILING DATE: 16-AUG-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: STEFFE, ERIC K.
; REGISTRATION NUMBER: 36,688
; REFERENCE DOCKET NUMBER: 1488.03000002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-371-2600
; TELEFAX: 202-371-2640
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 392 amino acids
; TYPE: amino acid
; TOPOLOGY: Linear
; MOLECULE TYPE: Protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:

Qy 1 MDTFLWSSLFFGSAERSQAQNTEFAVDLYQEVSLSHKDNTIFSPLGITLVEMQ 60 US-09-902-684-2
Db 1 MDTFLWSSLFFGSAERSQAQNTEFAVDLYQEVSLSHKDNTIFSPLGITLVEMQ 60
Qy 61 LGARKRAQQIRQLKQETSAGEEEFLVLSFCSAISEKQEFNLANALYLOGFTVK 120
Db 61 LGARKRAQQIRQLKQETSAGEEEFLVLSFCSAISEKQEFNLANALYLOGFTVK 120
Qy 121 EQYLHGKEFFOSAIKLVDFODAKACAEIMSTWVERTKIKDMFSGBEFGPLTRILV 180
Db 121 EQYLHGKEFFOSAIKLVDFODAKACAEIMSTWVERTKIKDMFSGBEFGPLTRILV 180
Qy 181 NAIYFGKDWKKERKERDTQIINFTRKNGSYKIPMKALRKYGYFSSSLLNQVLELS 240
Db 181 NAIYFGKDWKKERKERDTQIINFTRKNGSYKIPMKALRKYGYFSSSLLNQVLELS 240
Qy 241 YKGDESLIILIPAAEGMDEEVEKLITAQQLKWLSEMEEVEBISLSPRFKVEQVDFKD 300
Db 241 YKGDESLIILIPAAEGMDEEVEKLITAQQLKWLSEMEEVEBISLSPRFKVEQVDFKD 300
Qy 301 VLYSINITEIFSGGCDLSSGTDSSEVYVSOVTQYVFBNEDGEBAATSTGIH-IPVIMSL 360
Db 301 VLYSINITEIFSGGCDLSSGTDSSEVYVSOVTQYVFBNEDGEBAATSTGIH-IPVIMSL 360
Qy 361 AQSQFTIANHPPLFINKHNPPIESILEPGLNGRTVNP 392
Db 361 AQSQFTIANHPPLFINKHNPPIESILEPGLNGRTVNP 392

Qy 1 MDTFLWSSLFFGSAERSQAQNTEFAVDLYQEVSLSHKDNTIFSPLGITLVEMQ 60
Db 1 MDTFLWSSLFFGSAERSQAQNTEFAVDLYQEVSLSHKDNTIFSPLGITLVEMQ 60
Qy 61 LGARKRAQQIRQLKQETSAGEEEFLVLSFCSAISEKQEFNLANALYLOGFTVK 120
Db 61 LGARKRAQQIRQLKQETSAGEEEFLVLSFCSAISEKQEFNLANALYLOGFTVK 120
Qy 121 EQYLHGKEFFOSAIKLVDFODAKACAEIMSTWVERTKIKDMFSGBEFGPLTRILV 180
Db 121 EQYLHGKEFFOSAIKLVDFODAKACAEIMSTWVERTKIKDMFSGBEFGPLTRILV 180
Qy 181 NAIYFGKDWKKERKERDTQIINFTRKNGSYKIPMKALRKYGYFSSSLLNQVLELS 240
Db 181 NAIYFGKDWKKERKERDTQIINFTRKNGSYKIPMKALRKYGYFSSSLLNQVLELS 240
Qy 241 YKGDESLIILIPAAEGMDEEVEKLITAQQLKWLSEMEEVEBISLSPRFKVEQVDFKD 300
Db 241 YKGDESLIILIPAAEGMDEEVEKLITAQQLKWLSEMEEVEBISLSPRFKVEQVDFKD 300
Qy 301 VLYSINITEIFSGGCDLSSGTDSSEVYVSOVTQYVFBNEDGEBAATSTGIH-IPVIMSL 360
Db 301 VLYSINITEIFSGGCDLSSGTDSSEVYVSOVTQYVFBNEDGEBAATSTGIH-IPVIMSL 360
Qy 361 AQSQFTIANHPPLFINKHNPPIESILEPGLNGRTVNP 392
Db 361 AQSQFTIANHPPLFINKHNPPIESILEPGLNGRTVNP 392

INFORMATION FOR SEQ ID NO: 13:

SEQUENCE CHARACTERISTICS:
LENGTH: 405 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein

US-09-026-408-13

Query Match 100.0%; Score 1987; DB 3; Length 405;
Best Local Similarity 100.0%; Pred. No. 1.2e-187;
Matches 392; Conservative 0; Mismatches 0; Gaps 0;

Qy 1 MDTIFLWSLLLGFSQASRCSAQNTFTEAVDLYQEVSLSHKDNNIIFSPGLITVLEMVQ 60
Db 1 MDTIFLWSLLLGFSQASRCSAQNTFTEAVDLYQEVSLSHKDNNIIFSPGLITVLEMVQ 60

Qy 61 LGAKGKAQQIORTLKKQETTSAGEEFLVLSFCSAISEKKQEFETNIAANALYQEFPTVK 120
Db 61 LGAKGKAQQIORTLKKQETTSAGEEFLVLSFCSAISEKKQEFETNIAANALYQEFPTVK 120

Qy 121 EQYIHGNKEFFQSAIKLYDFQDAKACAMISTWERTDKIKDMFSGEEFSPTRLVV 180
Db 121 EQYIHGNKEFFQSAIKLYDFQDAKACAMISTWERTDKIKDMFSGEEFSPTRLVV 180

Qy 181 NAIFYFGDWKQKPFKEDTOLINFETKNGSSTVKPMMKALLRTKYGYFSESSINYQVLELS 240
Db 181 NAIFYFGDWKQKPFKEDTOLINFETKNGSSTVKPMMKALLRTKYGYFSESSINYQVLELS 240

Qy 241 YKGDEFSLILIPPAENDIEVEKLTAAQILKNSEMQEVEEVSILPREKVEQYDFKD 300
Db 241 YKGDEFSLILIPPAENDIEVEKLTAAQILKNSEMQEVEEVSILPREKVEQYDFKD 300

Qy 301 VLYSINITEIFSGCGDLGGITDSSEVYTSQVTKYPPINEDEGSEAATSTGTHIPVIMSL 360
Db 301 VLYSINITEIFSGCGDLGGITDSSEVYTSQVTKYPPINEDEGSEAATSTGTHIPVIMSL 360

Qy 361 AQSQFIANHPFLFIMKHNPTEISLFMGRVTNP 392
Db 361 AQSQFIANHPFLFIMKHNPTEISLFMGRVTNP 392

RESULT 4

US-09-902-684-13

Sequence 13, Application US/09902684

Patent No. 6649758

GENERAL INFORMATION:

APPLICANT: Ni et al.
TITLE OF INVENTION: PANCREAS-DERIVED PLASMINOGEN ACTIVATOR INHIBITOR

NUMBER OF SEQUENCES: 15

CORRESPONDENCE ADDRESS:
ADDRESSEE: STEENE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 110 NEW YORK AVENUE, SUITE 600
CITY: WASHINGTON
STATE: DC
COUNTRY: USA
ZIP: 20005-3934COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/902,684
FILING DATE: 12-Jul-2001
CLASSIFICATION: <Unknown>PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/026,408
FILING DATE: <Unknown>APPLICATION NUMBER: US 60/024,056
FILING DATE: 16-AUG-1996ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K.

REGISTRATION NUMBER: 36,688
REFERENCE DOCKET NUMBER: 1488.0300002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2340
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 405 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: Protein

US-09-902-684-13

SEQUENCE DESCRIPTION: SEQ ID NO: 13:
Query Match 100.0%; Score 1987; DB 4; Length 405;
Best Local Similarity 100.0%; Pred. No. 1.2e-187;
Matches 392; Conservative 0; Mismatches 0; Gaps 0;

Qy 1 MDTIFLWSLLLGFSQASRCSAQNTFTEAVDLYQEVSLSHKDNNIIFSPGLITVLEMVQ 60
Db 1 MDTIFLWSLLLGFSQASRCSAQNTFTEAVDLYQEVSLSHKDNNIIFSPGLITVLEMVQ 60

Qy 61 LGAKGKAQQIORTLKKQETTSAGEEFLVLSFCSAISEKKQEFETNIAANALYQEFPTVK 120
Db 61 LGAKGKAQQIORTLKKQETTSAGEEFLVLSFCSAISEKKQEFETNIAANALYQEFPTVK 120

Qy 121 EQYIHGNKEFFQSAIKLYDFQDAKACAMISTWERTDKIKDMFSGEEFSPTRLVV 180
Db 121 EQYIHGNKEFFQSAIKLYDFQDAKACAMISTWERTDKIKDMFSGEEFSPTRLVV 180

Qy 181 NAIFYFGDWKQKPFKEDTOLINFETKNGSSTVKPMMKALLRTKYGYFSESSINYQVLELS 240
Db 181 NAIFYFGDWKQKPFKEDTOLINFETKNGSSTVKPMMKALLRTKYGYFSESSINYQVLELS 240

Qy 241 YKGDEFSLILIPPAENDIEVEKLTAAQILKNSEMQEVEEVSILPREKVEQYDFKD 300
Db 241 YKGDEFSLILIPPAENDIEVEKLTAAQILKNSEMQEVEEVSILPREKVEQYDFKD 300

Qy 301 VLYSINITEIFSGCGDLGGITDSSEVYTSQVTKYPPINEDEGSEAATSTGTHIPVIMSL 360
Db 301 VLYSINITEIFSGCGDLGGITDSSEVYTSQVTKYPPINEDEGSEAATSTGTHIPVIMSL 360

Qy 361 AQSQFTANHPFLFIMKHNPTEISLFMGRVTNP 392
Db 361 AQSQFTANHPFLFIMKHNPTEISLFMGRVTNP 392

RESULT 5

US-08-434-881-2

Sequence 2, Application US/08434881

Patent No. 58494376

GENERAL INFORMATION:

APPLICANT: Braxton, Scott M.

APPLICANT: Wilce, Craig G.

TITLE OF INVENTION: Pancreas-Derived Serpin

NUMBER OF SEQUENCES: 2

CORRESPONDENCE ADDRESS:

ADDRESSEE: Incyte Pharmaceuticals, Inc.

STREET: 3330 Hillview Avenue

CITY: Palo Alto

STATE: California

COUNTRY: USA

ZIP: 94304

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/902,684
FILING DATE: 12-Jul-2001
CLASSIFICATION: <Unknown>PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/026,408
FILING DATE: <Unknown>APPLICATION NUMBER: US 60/024,056
FILING DATE: 16-AUG-1996ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K.

CLASSIFICATION: <Unknown>
SEQUENCE DESCRIPTION: SEQ ID NO: 13:
Query Match 100.0%; Score 1987; DB 4; Length 405;
Best Local Similarity 100.0%; Pred. No. 1.2e-187;
Matches 392; Conservative 0; Mismatches 0; Gaps 0;

ATTORNEY/AGENT INFORMATION:

NAME: Luther, Barbara J.
REGISTRATION NUMBER: 33954
REFERENCE/DOCKET NUMBER: PF0035 US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-855-0555
TELEFAX: 415-852-0195

SEQUENCE FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:
LENGTH: 406 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-434-881-2

Query Match 89.5%; Score 1777.5; DB 1; Length 406;
Best Local Similarity 90.4%; Pred. No. 5.9e-167; Indels 7; Gaps 2;
Matches 358; Conservative 7; Mismatches 24; Indels 7; Gaps 2;

Query 1 MDTIFWSSLJLFFSQAQRCNTEAVDLYQEVSLSHKDNNTIPLGIFTVLEMVQ 60
Db 1 MDTIFWSSLJLFFSQAQRCNTEAVDLYQEVSLSHKDNNTIPLGIFTVLEMVQ 60

Query 61 LGAKGKAQQQTROTLLKQCTSAGEFLVSKPCSAISEBKQFTENANALYL---QEG 116
Db 61 LGAKGKAQQQTROTLLKQCTSAGEFLVSKPCSAISEBKQFTENANALYL---QEG 116

Query 617 FTVEQYLGKNEKFQSAKLVLDFQDAKACAEIISTYVERKTDGKIKDMFSGBEFGPLTR 176
Db 618 FTVEQYLGKNEKFQSAKLVLDFQDAKACAGTISTYVERKTDGKIKDMFSGBEFGPLTR 177

Query 177 LVLDVAYFKGDWKQKFKEDTQLINFVKNGSTVKIPMKALLRTGYFSESSINYQV 236
Db 178 LVLDVAYFKGDWKQKFKEDTQLINFVKNGSTVKIPMKALLRTGYFSESSINYQV 237

Query 237 LELSYKGDFSLTLILPAGMDDEEVKLITAQILKWLSENQEEVEISLPRFKYEQV 296
Db 238 LELSYKGDFSLTLILPAGMDDEEVKLITAQILKWLSENQEEVEISLPRFKYEQV 297

Query 297 DFKDVLYSNITEFSGGDLSGITDSSEVVYVSQTVQFFINEDSEAATSTGTHIPV 356
Db 298 DFKDVLYSNITEFSGGDLSGITDSSEVVYVSQTVQFFINEDSEAATSTGTHIPV 357

Query 357 IMSLAQSOPIANHPLFLMKHNPTESTLFGMRYVTNP 392
Db 358 IMSLAQSOPIANHPLFLMKHNPTESTLFGMRYVTNP 393

RESULT 6
US-08-977-771-2
Sequence 2, Application US/0897771
Patent No. 6013448
GENERAL INFORMATION:
APPLICANT: Braxton, Scott M.
APPLICANT: Wilde, Craig G.
APPLICANT: Diep, Dinh
TITLE OF INVENTION: Pancreas-Derived Serpin
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESS: Incyte Pharmaceuticals, Inc.
STREET: 3330 Hillview Avenue
CITY: Palo Alto
STATE: California
COUNTRY: USA
ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/977,771
FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Luther, Barbara J.
REGISTRATION NUMBER: 08 / 434,881
REFERENCE/DOCKET NUMBER: 08 / 434,881
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Luther, Barbara J.
REGISTRATION NUMBER: 33954
REFERENCE/DOCKET NUMBER: PF0035 US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-855-0555
TELEFAX: 115-852-0195
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 406 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-977-771-2

Query Match 89.5%; Score 1777.5; DB 3; Length 406;
Best Local Similarity 90.4%; Pred. No. 5.9e-167; Indels 7; Gaps 2;
Matches 358; Conservative 7; Mismatches 24; Indels 7; Gaps 2;

Query 1 MDTIFWSSLJLFFSQAQRCNTEAVDLYQEVSLSHKDNNTIPLGIFTVLEMVQ 60
Db 1 MDTIFWSSLJLFFSQAQRCNTEAVDLYQEVSLSHKDNNTIPLGIFTVLEMVQ 60

Query 61 LGAKGKAQQQTROTLLKQCTSAGEFLVSKPCSAISEBKQFTENANALYL---QEG 116
Db 61 LGAKGKAQQQTROTLLKQCTSAGEFLVSKPCSAISEBKQFTENANALYL---QEG 116

Query 617 FTVEQYLGKNEKFQSAKLVLDFQDAKACAEIISTYVERKTDGKIKDMFSGBEFGPLTR 176
Db 178 FTVEQYLGKNEKFQSAKLVLDFQDAKACAGTISTYVERKTDGKIKDMFSGBEFGPLTR 177

Query 177 LVLDVAYFKGDWKQKFKEDTQLINFVKNGSTVKIPMKALLRTGYFSESSINYQV 236
Db 178 LVLDVAYFKGDWKQKFKEDTQLINFVKNGSTVKIPMKALLRTGYFSESSINYQV 237

Query 237 LELSYKGDFSLTLILPAGMDDEEVKLITAQILKWLSENQEEVEISLPRFKYEQV 296
Db 238 LELSYKGDFSLTLILPAGMDDEEVKLITAQILKWLSENQEEVEISLPRFKYEQV 297

Query 297 DFKDVLYSNITEFSGGDLSGITDSSEVVYVSQTVQFFINEDSEAATSTGTHIPV 356
Db 298 DFKDVLYSNITEFSGGDLSGITDSSEVVYVSQTVQFFINEDSEAATSTGTHIPV 357

Query 357 IMSLAQSOPIANHPLFLMKHNPTESTLFGMRYVTNP 392
Db 358 IMSLAQSOPIANHPLFLMKHNPTESTLFGMRYVTNP 393

RESULT 7
US-09-361-773-2
Sequence 2, Application US/09361773
Patent No. 6197119
GENERAL INFORMATION:
APPLICANT: Braxton, Scott M.
APPLICANT: Wilde, Craig G.
APPLICANT: Diep, Dinh
TITLE OF INVENTION: Pancreas-Derived Serpin
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESS: Incyte Pharmaceuticals, Inc.
STREET: 3330 Hillview Avenue
CITY: Palo Alto
STATE: California
COUNTRY: USA
ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/977,771
FILING DATE:

SOFTWARE: PatentIn Release #1.0, Version #1.30

APPLICATION DATA:

FILING DATE:

CLASSIFICATION:

PRIORITY APPLICATION DATA:

APPLICATION NUMBER: US/09/361,773

APPLICATION NUMBER: 08/977,771

FILING DATE:

APPLICATION NUMBER: 08/434,881

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Luther, Barbara J.

REFERENCE/DOCKET NUMBER: 33954

TELECOMMUNICATION INFORMATION:

TELEPHONE: 415-855-0555

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 406 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

US-09-361-773-2

Query Match 89.5%; Score 1777.5; DB 3; Length 406;

Best Local Similarity 90.4%; Pred. No. 5_9e-167;

Matches 358; Conservative 7; Mismatches 24;

Indels 7; Gaps 2;

Qy 1 MDTFLWSSLILFGSQARCSAQNTTAAVDIYQEVLISHKDNTIFFPLGLTIVLVMVQ 60

Db 1 MDTFLWSSLILFGSQARCSAQNTTAAVDIYQEVLISHKDNTIFFPLGLTIVLVMVQ 60

Qy 61 LGAKGKAQQQIQRQLKQOETSAGAEFLVKSFCGSAISKKQEFNTTANALYL----QEG 116

Db 61 LGAKGKAQQQIQRQLKQOETSAGAEFLVKSFCGSAISKKQEFNTTANALYL----QEG 116

Qy 62 FTKEQLHGKNEKFQSAKLKVDFQDAKACAEIMSTWVERKTGKIKMDSGEERGPLTR 176

Db 117 FTKEQLHGKNEKFQSAKLKVDFQDAKACAGMISTWVERKTGKIKMDSGEERGPLTR 176

Qy 118 FTKEQLHGKNEKFQSAKLKVDFQDAKACAGMISTWVERKTGKIKMDSGEERGPLTR 177

Db 118 FTKEQLHGKNEKFQSAKLKVDFQDAKACAGMISTWVERKTGKIKMDSGEERGPLTR 177

Qy 119 LVLNATYFKDWKQFRKEDTQLINFKNGSTVKIPMKMALARTRKGYFSESSLYNQ 236

Db 178 LVLNATYFKDWKQFRKEDTQLINFKNGSTVKIPMKMALARTRKGYFSESSLYNQ 237

Qy 237 LELSYKGDEFSLITLPAEGMDIEBEVEKLITAQQLWLSEMEEEVISLPRFKVQV 296

Db 238 LELSYKGDEFSLITLPAEGMDIEBEVEKLITAQQLWLSEMEEEVISLPRFKVQV 297

Qy 297 DFKDVLYSINITEIFSGGCDLSGITDSSEVYSSQTVKFFYLEDGSEBAATSTGTHIPV 356

Db 298 DFKDVLYSINITEIFSGGCDLSGITDSSEVYSSQTVKFFYLEDGSEBAATSTGTHIPV 357

Qy 357 IMSLAQSOFAKHPFLIMKHNPTESILMGRVTNP 392

Db 358 IMSLAQSOFAKHPFLIMKHNPTESILMGRVTNP 393

Qy 361 AOSQFLIANHPPRFIMKHNPNTESILMGRVTNP 392

Db 366 LYPOVIVDHPFFFLIRNRPTGTLMGRVNH 397

RESULT 8
US-08-948-997-2
Sequence 2, Application US/0846997
Patent No. 6008020

GENERAL INFORMATION:

APPLICANT: HASTINGS, GREGG

APPLICANT: COLEMAN, TIM

APPLICANT: LAWRENCE, DANIEL

TITLE OF INVENTION: BRAIN-ASSOCIATED INHIBITOR OF PLASMINOGEN ACTIVATOR

NUMBER OF SEQUENCES: 17

CORRESPONDENCE ADDRESS:

ADDRESSE: HUMAN GENOME SCIENCES, INC.
STREET: 9410 KEY WEST AVENUE
CITY: ROCKVILLERESULT 9
US-09-348-817A-2
Sequence 2, Application US/09348817A
Patent No. 6191260

GENERAL INFORMATION:

APPLICANT: Hastings et al.

TITLE OF INVENTION: Brain-Associated Inhibitor of Tissue-Type Plasminogen

FILE REFERENCE: PF3361

CURRENT APPLICATION NUMBER: 1999-07-08

PRIORITY APPLICATION NUMBER: 08/948,997

PRIORITY FILING DATE: 1997-10-10

PRIOR APPLICATION NUMBER: 60/028,117
 PRIOR FILING DATE: 1996-10-11
 NUMBER OF SEQ ID NOS: 17
 SOFTWARE: PatentIn Ver. 2.1
 SEQ ID NO: 2
 LENGTH: 410
 TYPE: PRT
 ORGANISM: Homo sapiens
 FEATURE: Propep
 NAME/KEY: signal
 LOCATION: (1)..(18)
 NAME/KEY: chain
 LOCATION: (1)..(410)
 US-09-722-292-2

Query Match 39.8%; Score 791.5; DB 3; Length 410;
 Best Local Similarity 39.5%; Pred. No. 1..e-69;
 Matches 97; Mismatches 135; Indels 5; Gaps 2;

Qy 6 LWSLLLFFGQSARCSAQRNTEFADLYQEVLSLHKD-NIIFSPPLGITLVLEMVQGAK 64
 Db 6 LPSLLVLQSMATGATPEEAIADSLVNMNRLATGEDENILSPSIALAMGMMEGAQ 65
 Qy 6 GKAQQQIROTLLKQETSGAGEFLYKSFCSAISEBKQKOFFTENANALYLQEGFTVKREOYL 124
 Db 6 GSTQKIRHMGYQSLKNGBEFSFLKEISNMVTAKEQVMKIANSLVQNGFHVNEBFL 125
 Qy 125 HGNKEFFQSAIKLVDFOAKACAMISTWERKDGTIKDMFSGEBFGPLTRLVLYNAIY 184
 Db 126 QMMKXYENAVNHDFSQNVAVANYINKRVENTNNLYKLDSPRDPAATYLALNAVY 185
 Qy 126 FGKDWKQKERKEDTOLINFKGSTVLPKMKALLRTKYGYSSESLN--YQVELS 240
 Db 126 FGKAWKKSQRFPENTRTFSITKODSEVQLPMMYQQGEFYGETSDGGNEAGGYQVEIP 245
 Qy 126 QMMKXYENAVNHDFSQNVAVANYINKRVENTNNLYKLDSPRDPAATYLALNAVY 185
 Db 126 GSTQKIRHMGYQSLKNGBEFSFLKEISNMVTAKEQVMKIANSLVQNGFHVNEBFL 125
 Qy 126 HGNKEFFQSAIKLVDFOAKACAMISTWERKDGTIKDMFSGEBFGPLTRLVLYNAIY 184
 Db 126 QMMKXYENAVNHDFSQNVAVANYINKRVENTNNLYKLDSPRDPAATYLALNAVY 185
 Qy 126 FGKDWKQKERKEDTOLINFKGSTVLPKMKALLRTKYGYSSESLN--YQVELS 240
 Db 126 FGKAWKKSQRFPENTRTFSITKODSEVQLPMMYQQGEFYGETSDGGNEAGGYQVEIP 245
 Qy 126 YEGDEISMMLVLSQEVPPLATEPLVNZQLVWEANSVKKQKRVVEVYLPRPTVEQELKD 305
 Db 126 VLYSINITFSGGCDLSGITDSSESVYVSQTVOKVFFINEEDSEATASTGTHIPVIMSL 360
 Qy 126 VLKAGITIFIDANLGLSDKNEIFPSKATHKSFLLEVNEBSEAAAVSGMIAISRMAV 365
 Db 126 ACQSFIAINRPFLKHNKPTESTILEMGRVTNP 392
 Qy 126 LYPQVIVDPFFLIRNRRTGTLFMGRVMHP 397

RESULT 11
 US-09-348-817A-3
 Sequence 3, Application US/09348817A
 Patent No. 6191260
 GENERAL INFORMATION:
 APPLICANT: Hastings et al.
 TITLE OF INVENTION: Brain-Associated Inhibitor of Tissue-Type Plasminogen
 FILE REFERENCE: PF336D1
 CURRENT APPLICATION NUMBER: US/09/348-817A
 CURRENT FILING DATE: 1999-07-08
 PRIOR APPLICATION NUMBER: 08/1948,997
 PRIOR FILING DATE: 1997-10-10
 PRIOR APPLICATION NUMBER: 60/028,117
 PRIOR FILING DATE: 1996-10-11
 NUMBER OF SEQ ID NOS: 17
 SEQ ID NO: 3
 LENGTH: 410
 TYPE: PRT
 ORGANISM: Gallus gallus
 US-09-348-817A-3

RESULT 10
 US-09-722-292-2
 Sequence 2, Application US/09722292
 Patent No. 6541452
 GENERAL INFORMATION:
 APPLICANT: Hastings et al.
 TITLE OF INVENTION: Activator
 CURRENT APPLICATION NUMBER: US/09/722,292
 CURRENT FILING DATE: 2000-11-28
 PRIOR FILING DATE: 1999-07-08
 PRIOR APPLICATION NUMBER: 60/028,117
 PRIOR FILING DATE: 1996-10-11
 SOFTWARE: PatentIn Ver. 2.1
 SEQ ID NO: 2
 LENGTH: 410
 TYPE: PRT
 ORGANISM: Homo sapiens
 FEATURE: Propep
 NAME/KEY: Propep

Db 63 GAGHTTKEIRHSLGDSLNLGEETFLIDSNVATTESHYVINMANSLYVONGPHYS 122 Qy 358 MSLAQSOFIANHPPLFLMKHNPTESLLEMGRVTNP 392 Db 122 QYLHGNEFFOSAIKLVDFQDAKACAEIISTWVERKTGKIKOMFSGEFGPLTRLYVN 181 Qy 363 MAVLPQVIVDHPFLVRNRTGTFLFMGRVMHP 397 Db 123 KFLQLVKYKFAEVENIDFQSOSAAVATHINKWENHTNNMIKDFVSSRDFSLTHLYVN 182

RESULT 13
 Qy 182 AIFYKGDKWQKPFKEDTQLINFTRKNGSTYKIPMKALLRTKYGYSESSLN---YQVL 237
 Db 183 AIFYKGKWNKSQFRPENTRIFSPKDETFQIPMNYQQCFFYQEFYQDSSNEAGGIYQVL 242
 Qy 238 ELSYKGDEFSLTLILPAEIGNDIEVEKLTPAQQLRWLSEMQEEVEETSLPRFKVEQKD 297
 Db 243 EPIYEDEISMVILSRQEYPLVLEPLVKAISLINEANVSKQKVYVLPRTFVEQED 302
 Qy 298 FKDVLYSLNITEIFSGGCDSLGSITDSEVYTSVOTQKVFFINEDGESEAATSTGIHPIV 357
 Db 303 LRDVLKGGLITEFVFSRSDLTMSDNKELYLAKAHKAFALEVNEEGSEAAASGMIAIS 362
 Qy 358 MSLAQQFIANHPPLFLMKHNPTESTLLEMGRVTNP 392
 Db 363 MAVLPQVIVDHPFLVRNRTGTFLFMGRVMHP 397

RESULT 12
 Qy US-09-722-292-3 Sequence 3, Application US/09722292
 Db Patent No. 651452
 Qy GENERAL INFORMATION:
 Db APPLICANT: Hastings, et al.
 Qy TITLE OF INVENTION: Brain-Associated Inhibitor of Tissue-Type Plasminogen
 Db FILE REFERENCE: PF336D1
 Qy CURRENT APPLICATION NUMBER: US/09/722,292
 Db CURRENT FILING DATE: 2000-11-28
 Db PRIOR APPLICATION NUMBER: 09/348,817
 Db PRIOR FILING DATE: 1999-07-08
 Db PRIOR FILING DATE: 1998-10-11
 Db NUMBER OF SEQ ID NOS: 17
 Db SOFTWARE: Patentin Ver. 2.1
 Db SEC ID NO: 3
 Db LENGTH: 410
 Db TYPE: PRT
 Db ORGANISM: Gallus gallus
 Us US-09-722-292-3

Query Match 39.7%; Score 788.5; DB 4; Length 410;
 Best Local Similarity 40.0%; Pred. No. 2.8e-99;
 Matches 158; Conservative 92; Mismatches 138; Indels 7; Gaps 3;

5 FLMLSLLUFFGSOASRCSAQKNT--EPADLYQEVSLSHKD-NIIFSPGLITVYLEMVL 61
 3 FLGLSLLVLPSKAFTKFPDTIAESVNVYQNQDRAEEDNLFCPLSIAANGMIEL 62

Qy 62 GAGKKAQOIRQLKQDGETSAREEFLYVKSFSAISSRKQFETNIALYQEGFTKE 121
 Db 63 GAHTTKEIRHSLGDFSLNKGEETFLPKDLSMATTESHYVLNANSLYVQNGPHVSE 122

Qy 122 QYLHGNEFFOSAIKLVDFQDAKACAEIISTWVERKTGKIKDMFGEFGPLTRLYVN 181
 Db 123 KFLQLVKYKFAEVENIDFQSOSAAVATHINKWENHTNNMIKDFVSSRDFSLTHLYVN 182

Qy 182 AIFYKGDKWQKPFKEDTQLINFTRKNGSTYKIPMKALLRTKYGYSESSLN---YQVL 237
 Db 183 AIFYKGKWNKSQFRPENTRIFSPKDETFQIPMNYQQCFFYQEFYQDSSNEAGGIYQVL 242

Qy 238 ELSYKGDEFSLTLILPAEIGNDIEVEKLTPAQQLRWLSEMQEEVEETSLPRFKVEQKD 297
 Db 243 EPIYEDEISMVILSRQEYPLVLEPLVKAISLINEANVSKQKVFFINEDGESEAATSTGIHPIV 302

Qy 298 FKDVLYSLNITEIFSGGCDSLGSITDSEVYTSVOTQKVFFINEDGESEAATSTGIHPIV 357
 Db 303 LRDVLKGGLITEFVFSRSDLTMSDNKELYLAKAHKAFALEVNEEGSEAAASGMIAIS 362

RESULT 14
 Qy US-08-948-997-3 Sequence 3, Application US/08948997
 Db Patent No. 6000020
 Qy GENERAL INFORMATION:
 Db APPLICANT: HASTINGS, GREGG
 Db APPLICANT: COLEMAN, TIM
 Db APPLICANT: LAWRENCE, DANIEL
 Qy TITLE OF INVENTION: BRAIN-ASSOCIATED INHIBITOR OF TISSUE-TYPE PLASMINOGEN ACTIVATOR
 Db NUMBER OF SEQUENCES: 17
 Db CORRESPONDENCE ADDRESS:
 Db ADDRESSEE: HUMAN GENOME SCIENCES, INC.
 Db STREET: 9410 KEY WEST AVENUE
 Db CITY: ROCKVILLE
 Db STATE: MD
 Db COUNTRY: USA
 Db ZIP: 20850

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/948,997
 FILING DATE: Oct-10-97
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: A. ANDERS BROOKES
 REGISTRATION NUMBER: 36,373
 REFERENCE/OCKET NUMBER: PP336
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (301) 309-8504
 TELEFAX: (301) 309-8512
 INFORMATION FOR SEQ ID NO: 3:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 407 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 Us US-08-948-997-3

Query Match 38.0%; Score 756; DB 3; Length 3;
 Best Local Similarity 39.2%; Pred. No. 4.1e-63;
 Matches 154; Conservative 90; Mismatches 143; Indels 154;

5 FLWSILLPPGSQASRCQAQNTBEAV-DLYQEVSLSHKDNIIFS
 3 FLGLSLLVLPSKAFTKFPDTIAESVNVYQNQDRAEEDNLFC
 Qy 64 KGKAOQQTROTLLKQDGETSAGEEFPLVKSFCSAISEKQDFETFNIA
 Db 63 HGTTKEIRHSLGFTSLKNGEETFLKDLDSMATTESHYVLNMA
 Qy 124 LHGNREFFQSAIKLVDFODAKACAEIMISTWVERKTGKIKDMFGEFGPLTRLYVN
 Db 123 LQLVKYKFAEVENIDFQSOSAAVATHINKWENHTNNMIKDFVSSRDFSLTHLYVN
 Qy 184 YPKGMWKQKPFKEDTQLINFTRKNGSTYKIPMKALLRTKYGYSESSLN
 Db 182 YFKGMWKSQRPENTRIFSPKDETFQIPMNYQQCFFYQEFYQDSSNEAGGIYQVL
 Qy 240 SYKGDEFSLTLILPAEIGNDIEVEKLTPAQQLRWLSEMQEEVEETSLPRFKVEQKD
 Db 242 PYGEGDEMMIVSLSQEVPLVTLFVLSASLINEANVSKQKVFFINEDGESEAATSTGIHPIV
 Qy 298 FKDVLYSLNITEIFSGGCDSLGSITDSEVYTSVOTQKVFFINEDGESEAATSTGIHPIV 357
 Db 303 LRDVLKGGLITEFVFSRSDLTMSDNKELYLAKAHKAFALEVNEEGSEAAASGMIAIS 362

RESULT 14
 US-08-487-823B-2
 Sequence 2, Application US/08487823B
 GENERAL INFORMATION:
 APPLICANT: Braxton, Scott M.
 APPLICANT: Diep, Dinh
 APPLICANT: Stuart, Susan G.
 TITLE OF INVENTION: NOVEL SERPIN DERIVED FROM HUMAN
 TITLE OF INVENTION: HYPOTHALAMUS
 NUMBER OF SEQUENCES: 5
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Incyte Pharmaceuticals, Inc.
 STREET: 3174 Porter Drive
 CITY: Palo Alto
 STATE: CA
 COUNTRY: US
 ZIP: 94304
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Diskette
 COMPUTER: IBM Compatible
 OPERATING SYSTEM: DOS
 SOFTWARE: FastSeq Version 1.5
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/487,823B
 FILING DATE: 07-JUN-1995
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER:
 FILING DATE:
 ATTORNEY/AGENT INFORMATION:
 NAME: Luther, Barbara J.
 REGISTRATION NUMBER: 23,954
 REFERENCE/DOCKET NUMBER: PF-0039 US
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 415-855-0555
 TELEFAX: 415-852-0195
 TELEX:
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 407 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-487-823B-2

Query Match Score 751; DB 1; Length 407;
 Best Local Similarity 39.8%; Prd. No. 1..4-65;
 Matches 152; Conservative 95; Mismatches 137; Indels 8; Gaps 5;

Qy 6 LWSLLLPGSQASRCSAQQNTEFAVLYQEVSLSHKD-NIIFSPUGITLVEMVOLGAK 64 -
 Db 6 LFSPLVLQSMATGFPEAVLDSVNNYRNLRATEDENIFSPSIALAMGMELGAQ 65

Qy 65 GKAQQQIRQLKQETSGEEFLVKPSCAISEKKEFTNLANLYLQEGFTVKEQL 124
 Db 66 GSTQEIRHSMGYDLSLNGEETSFLEPKSMNTAKESOYMKIANLFLVQNGPHYNEFT 125

Qy 125 HGKEFFGSSAIKVDFQDAKACAMISTWEEKTDGKIDMSEGBGPTRLVNAY 184
 Db 126 QMKKYFWAANHVDFSONVAVANYINKWENNTNLVQDVLVSPrDFAXTYLALINAY 185

Qy 185 FKGDWKQRKERKDQLINFTRKGSTVPMKALLRTKGYFSESSLN---YOLELS 240

RESULTS 15
 US-08-997-040-2
 Sequence 2, Application US/08997040
 Patent No. 5929210
 GENERAL INFORMATION:
 APPLICANT: Braxton, Scott M.
 APPLICANT: Diep, Dinh
 APPLICANT: Stuart, Susan G.
 TITLE OF INVENTION: NOVEL SERPIN DERIVED FROM HUMAN
 NUMBER OF SEQUENCES: 5
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Incyte Pharmaceuticals, Inc.
 STREET: 3174 Porter Drive
 CITY: Palo Alto
 STATE: CA
 COUNTRY: US
 ZIP: 94304
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Diskette
 COMPUTER: IBM Compatible
 OPERATING SYSTEM: DOS
 SOFTWARE: FastSeq Version 1.5
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/997,040
 FILING DATE:
 CLASSIFICATION: 536
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: 08/487,823
 FILING DATE: 07-JUN-1995
 ATTORNEY/AGENT INFORMATION:
 NAME: Luther, Barbara J.
 REGISTRATION NUMBER: 33,954
 REFERENCE/DOCKET NUMBER: PF-0039 US
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 415-855-0555
 TELEFAX: 415-852-0195
 TELEX:
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 407 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-997-040-2

Query Match Score 751; DB 2; Length 407;
 Best Local Similarity 38.6%; Prd. No. 1..4-65;
 Matches 152; Conservative 95; Mismatches 137; Indels 8; Gaps 5;

Qy 6 LWSLLLPGSQASRCSAQQNTEFAVLYQEVSLSHKD-NIIFSPUGITLVEMVOLGAK 64 -
 Db 6 LFSPLVLQSMATGFPEAVLDSVNNYRNLRATEDENIFSPSIALAMGMELGAQ 65

Qy 125 HGKEFFGSSAIKVDFQDAKACAMISTWEEKTDGKIDMSEGBGPTRLVNAY 184
 Db 126 QMKKYFWAANHVDFSONVAVANYINKWENNTNLVQDVLVSPrDFAXTYLALINAY 185

Qy 361 AQSQFIANHPPFLFIMHNPTESILFMGRVTP 392
 Db 363 LYPOQVIVDHPPFFLIRNRRTGTLFMGRVTP 394

Db 66 GSTQKEIRHSMGYDSLXINGEEFSFLIKEFSNMVTAKESSQYVMKIANSLFVQNGFFHVNEEFL 125
 Qy 125 HGNKEFFOSAIKLYDFODAKACADMISTVERATDGKIKDMFSGEEFSPTRAVLYNAY 184
 Db 126 QNMKYFNAVNHDFSQNVAVANYINVENTNMLKDLSPRDFAATYLALINAVY 185
 Qy 185 FKGDWKOKFRKEDTOLINTFKRKGSTVTKPMMKALLRTKYGYESSESN----YOLELS 240
 Db 186 FKGNAKSQFRPENIRTFSFTKDDSEVQIPMNYOOGEFYGFSDGSNBAGGIYQLEIP 245
 Qy 241 YKGDEFSLITLPAEGMDIEEVKLITAQIQLKILSENQEVEYEISPERFYEQYKUDFD 300
 Db 246 YEGDLSMMILVLSRDEVPLATEPAKAQVEEVANSYKQVEYLRFTEQEIDKD 305
 Qy 301 VLYSLNITEFSGGCDLSGTDSSEVVSOVTQKUFFINEDGESEAATSTGHIPIVIMSL 360
 Db 306 VLKALGITEIFI-KLKFDLS-SDNKEIFLSKAHKSFLEVNEEGSELTS-GM-IQLVCCC 362
 Qy 361 AQSOPTAHHPFLIMKHNPPESTLFMGRYTNP 392
 Db 363 LYPOVIVDABPFELIRNRRTGTLFMGRYMP 394

Search completed: October 21, 2004, 06:46:59
 Job time : 41 secs

